CALRG Annual Conference 2012
Computers and Learning Research Group
19-20 June 2012

Abstracts
Jennie Lee Building
The Open University, Milton Keynes

Compiled by Canan Blake
Vickie Curtis
For further information please visit:  
http://kn.open.ac.uk/calrg

or contact:

Dr Canan Blake  
c.tosunoglu@open.ac.uk
Institute of Educational Technology  
The Open University  
Walton Hall  
Milton Keynes  
MK7 6AA
## CALRG Annual Conference 2012

### Table of Contents

<table>
<thead>
<tr>
<th>Authors / Abstract Title</th>
<th>Page No</th>
</tr>
</thead>
</table>
| Andrew Brasher, Agnes Kukulska-Hulme, Ann Jones, Jan Jones, Eileen Scanlon
*Supporting integration through incidental learning* | 5 |
| Simon Buckingham Shum and Rebecca Ferguson IET
*Enquiry Blogger Project* | 6 |
| Doug Clow
*iSpot: A Growing Informal Learning Community* | 7 |
| Elizabeth FitzGerald
*Assessing informal learning: a case study using historical audio guides* | 9 |
| Felicity Harper, Hannelore Green and María Fernandez-Toro
*Evaluating the integration of Jing® screencasts in feedback on written assignments* | 11 |
| Graham Healing and Chris Jones
*What do studying and teaching online look like? Looking at student and tutor video diaries* | 13 |
| Jo Iacovides
*Digital games: Motivation, engagement and informal learning* | 15 |
| Adrian Kirkwood
*If you don’t know where you are going...how do you know if you have arrived?* | 16 |
| Chris Lima
*Reading and discussing literature online: A Study on dialogue and online interaction* | 18 |
| Rose Luckin
*“With the lights out, it’s less dangerous”: tapping into teen spirit to inform technology design for personal energy consumption understanding* | 20 |
| Heather Mendick and Marie-Pierre Moreau
*Gender in Online Science and Technology: Understanding the gap between narratives and texts* | 21 |
<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keren Mills</td>
<td>Supporting learners in mobile discovery of library resources</td>
<td>22</td>
</tr>
<tr>
<td>Alice Peasgood</td>
<td>Old learning habits and new technologies: the impact of choice, control and identity in the learning experiences of novice adult students using ICT</td>
<td>23</td>
</tr>
<tr>
<td>Andrew Ravenscroft</td>
<td>RadioActive: Informal Learning and Employability through Internet Radio and Social Media</td>
<td>24</td>
</tr>
<tr>
<td>Thiemo Romey, Anne Adams and Tom Argles</td>
<td>The ‘Gamification’ of GIS for teaching and learning</td>
<td>25</td>
</tr>
<tr>
<td>The iTunes U at the OU learner</td>
<td>Fernando Rosell-Aguilar</td>
<td>27</td>
</tr>
<tr>
<td>Jon Rosewell</td>
<td>Can a computer marked exam improve retention?</td>
<td>29</td>
</tr>
<tr>
<td>Jon Rosewell, Karen Kear and Keith Williams</td>
<td>Next Steps for Excellence in the Quality of e-Learning</td>
<td>31</td>
</tr>
<tr>
<td>Mike Sharples</td>
<td>Learning with Technology In, About, Through and Despite Context</td>
<td>33</td>
</tr>
<tr>
<td>Denise Whitelock</td>
<td>How is evidence-based literature informing e-Assessment practice: Findings from an HEA project</td>
<td>34</td>
</tr>
</tbody>
</table>
Supporting integration through incidental learning

Andrew Brasher, Agnes Kukulska-Hulme, Ann Jones, Jan Jones, Eileen Scanlon
IET, The Open University
A.J.Brasher@open.ac.uk; A.M.Kukulska-Hulme@open.ac.uk; A.C.Jones@open.ac.uk;
Jan.Jones@open.ac.uk; E.Scanlon@open.ac.uk

The Maseltov project (“Mobile Assistance for Social Inclusion and Empowerment of Immigrants with Persuasive Learning Technologies and Social Network Services”, http://www.maseltov.eu/) recognises major risks for social exclusion of immigrants and identifies the potential of mobile services for promoting integration and cultural diversity in Europe.

The project intends to exploit the potential of mobile services for promoting integration and cultural diversity in Europe, and is focusing on support for immigrants with particular needs, e.g. those who have not learned foreign languages, and who have a cultural background that contrasts with that of their host country.

We will present the first iteration of an incidental learning framework developed within the Maseltov project. This framework is intended to facilitate the coordination of existing technologies, content, pedagogies, processes and practices into learning services that can be used effectively by immigrants, their networks and mentors, so as to increase immigrants’ ability to function in an unfamiliar society. When fully developed, the framework is intended to support the design of learning experiences which show:

(i) how incremental, opportunistic, social and game-based learning can be applied to immigrants problems; (ii) which content areas can be offered and combined (from among language, culture, information access, mobility, health care, etc.); and (iii) which technologies are best suited for each type of content and interaction.
Enquiry Blogger Project

Simon Buckingham Shum, KMI, The Open University
Rebecca Ferguson IET, The Open University

S.Buckingham.Shum@open.ac.uk; R.M.Ferguson@open.ac.uk

EnquiryBlogger will inspire young learners who want their education to be more relevant to their lives and interests. Research by Rebecca Ferguson and Simon Buckingham Shum of the OU’s Knowledge Media Institute is focusing on how improving enquiry skills can engage and challenge children at school.

EnquiryBlogger supports children to work, collaborate and reflect on enquiry-based studies that help them to harness their own interests and enthusiasm in order to develop their skills and knowledge. A nine-step approach provides a clear way of moving a personal enthusiasm into a detailed and valid enquiry that can be assessed by teachers and applied by pupils. The project is funded by the Paul Hamlyn Foundation’s Learning Futures programme, a national initiative to foster, evaluate and share secondary school innovation.

http://learningemergence.net/tools/enquiryblogger
iSpot: A Growing Informal Learning Community

Doug Clow
IET, The Open University
D.J.Clow@open.ac.uk

iSpot is a website designed to support learning about nature through sharing observations of wildlife. These observations serve as shared social objects, supporting focused discussion and learning. Users upload a photograph, with a location and a description of what they've seen. They and other users can then comment on the observation, and add an identification of the species observed using iSpot's tools to support scientific names. Users can 'Agree' with an identification, which works in interface terms rather like a Facebook 'Like'. However, not all agreements are weighted equally: an identified expert's agreement counts for much more than a new user's. Agreements also increase the score of the person who made the identification, again weighted by the score of the person making the agreement. The scoring is represented in simplified terms next to each user's name, along with 'badges' for members of relevant nature groups. This reputation system was designed to support and encourage learning by providing feedback to learners (a proxy form of assessment), and making expertise of users visible.

The site was launched in Summer 2009, and has grown considerably since then. Over 18,000 users have posted over 100,000 observations; more than 125,000 identifications have received more than 400,000 agreements. The site was linked to an OU short science course, S159 Neighbourhood Nature. The assessment included contributions to iSpot and a multiple-choice online exam.

This approach to learning activity - a large-scale open online system to support learning, with assessment requiring little or no individual academic input – is attracting significant policy interest at the moment. With recent developments and announcements such as MITx, Coursera, Udacity and edX., iSpot offers a long-standing case study to provide some grounding for the hype.
So what’s been going on? Has anyone learned anything?

This presentation will:

• outline iSpot and its growth to date,
• present some analysis of the activity on the site – in quantitative and qualitative terms, and what that might mean for learning, and
• discuss future directions for the iSpot project, for research in to iSpot itself, and for understanding and developing large-scale online open courses.
Assessing informal learning: a case study using historical audio guides

Elizabeth FitzGerald
IET, The Open University
E.J.Fitzgerald@open.ac.uk

This paper presents the findings from a study that investigated how geolocated audio could be used to provide opportunities for public learning of history. The project, utilising mobile media and informal learning, was a collaboration between academic and community-based historians interested in enhancing public understanding of selected aspects of the history of Nottingham. It was concerned with supporting the enhancement of historical literacy, historical ‘empathy’, and participants’ abilities to draw informed conclusions about contested historical subject matter. The historical subject matter was the 1831 Reform Riots in Nottingham, around which a local community history group designed a guided ‘history walk’. The project supported a realisation of this walk and also gathered participant responses from both a ‘people-led’ walk and an alternative ‘technology-led’ version of the walk, where a media experience was delivered to participants through handheld devices that triggered the playing of audio files with information contained from different historical sources at specific locations of relevance to the Reform Riots around the city of Nottingham. Responses were recorded via a combination of methods: by questionnaires filled in immediately after each walk, researcher observations, and debriefing sessions of selected participants.

The audio tours were designed to enable public learning of historical events, through three interdependent aspects (see Figure 1 below):

1. Attaining historical literacy (i.e. learning basic facts about the Reform Riot: what happened in the period of the riot?)
2. Experiencing ‘empathy’ with historical subjects (i.e. what was this period and these events like for different people?)
3. Developing historical interpretation skills (i.e. responding to and evaluating accounts from a variety of perspectives: how were these events and their causes viewed from differing and/or conflicting perspectives?)
Figure 1: Model for representing aspects – or objectives – of historical learning

These three aspects – or objectives – are thought to be hierarchical, where the first objective (historical literacy) must be gained before the second one (historical empathy) can be achieved. Historical interpretation, the third objective, can only be achieved once participants have experienced historical empathy.

This conference presentation will examine the extent to which participants in both walks showed evidence of having achieved these objectives, the value of having done so, and also suggests how the objectives can be used in the design process of authoring similar experiences to enable informal learning to occur.
Evaluating the integration of Jing® screencasts in feedback on written assignments

Felicity Harper, Hannelore Green, María Fernandez-Toro

The Department of Languages, Faculty of Education and Languages Studies
The Open University

F.S.Harper@open.ac.uk; M.C.Fernandez-Toro open.ac.uk; H.Green open.ac.uk

In addition to written summary comments, students studying modern languages at the Open University receive annotations and corrections on their written eTMA scripts, and spoken feedback on speaking tasks. We have investigated using Jing®, free software allowing the recording of a five-minute video of what is happening on a computer screen accompanied by a tutor commentary, to provide feedback on written assignments. This presentation reports on the student and tutor responses to the medium and the nature of the feedback in terms of depth and focus. The project involved students from three language modules at three different levels, and aimed to:

- identify any issues regarding the functionality of the tool;
- investigate the range of approaches tutors took to providing Jing® feedback;
- analyse the nature of the feedback in terms of the criteria being addressed and its depth in relation to strengths and weaknesses;
- evaluate the students’ and tutors’ perception of the tool’s usefulness,

Tutors adopted various methods of incorporating Jing® feedback, most providing a commentary on each student’s TMA but two creating a generic recording of a grammatical explanation.

Seven students completed the online questionnaire and five took part in a follow-up interview. Students cited a number of benefits of Jing® feedback, including clearer explanations, improved retention of information and better engagement with feedback. They found it motivating, and welcomed the benefits of hearing a native speaker read the words they had written. They talked of the advantages of a multi-sensory approach. They
felt that Jing could also be used to provide generic recordings on language issues before or after assessments, or as part of the feedback to an individual student. Disadvantages mentioned were that it could be more difficult to access the feedback later and possibly more time consuming.

Nine tutors participated, generating Jing feedback on 57 eTMAs. Tutors were unanimous in approving the use of the tool, finding it a more personal way of giving feedback and more flexible in allowing fuller explanations. Many talked of increased ‘presence’ and a sense of feeling as if they were talking to the student in the room. They found the ability to make corrections and explain them orally at the same time a great benefit. Concerns from tutors were around how Jing could be incorporated into traditional feedback without increasing workload.

Preliminary findings suggest that using screencasts in conjunction with written comments elicits richer and deeper feedback. In addition to receiving error corrections and/or explanations, hearing the tutor’s voice seems to create a greater affective engagement. Although receiving the feedback remains asynchronous, it establishes a learning dialogue between student and tutor that has the potential to be extended beyond the assignment. Tutors and students will need to develop new strategies to work with digitally mediated interactive feedback.

The feasibility of extending the use of Jing® on a larger scale needs to be investigated further, as do the outcomes at different levels of language proficiency (i.e. recorded feedback in the target language for foreign language learners).
What do studying and teaching online look like? Looking at student and tutor video diaries

Graham Healing and Chris Jones
IET, The Open University

g.healing@open.ac.uk; c.r.jones@open.ac.uk

This paper reports the methods and results from an evaluative project at the Open
University examining students’ and Associate Lecturers’ experience of online materials and
services provided for three Level 1 modules. The project used a mixture of written and self-
recorded video diaries during 3 one week long interventions and interviews at the beginning
and end of 3 first level modules. The modules (AA100, K101 and S104) were chosen for their
importance as foundation modules in contrasting subjects and included a combination of
electronic and printed material. Students were encouraged to use forums but could also
attend face-to-face tutorials or day schools.
In total, seven ALs and twenty-one students were recruited as participants. The main
findings of the study were that:

- Technology was not a highly salient issue.
- Use of the module web site was regular and frequent.
- There were no reports of any systematic difficulties with the OU Web presence.
- Many students involved in this project used a small range of the features of the VLE.
- There was evidence of a minority of students who were either excluded from access,
or were late and reluctant adopters of new technology.
- Technological change was perceived by the students and Associate Lecturers as
  continuous and unending.
- Students and Associate Lecturers were engaged in an on-going and rapid process of
technological change in particular in relation to:
  - Mobility - and the integration of various mobile devices including smartphones,
tablet computers and e-book readers;
  - Reading - related to the recent availability of e-book readers and tablet computers
- Mobile devices are now widely available but the way mobile possibilities and forms
  of access are taken–up is likely to be uneven.
• The relationship between various devices and the availability of different kinds of network access combined to make a rich technological ecology.
• Stable and regular practices surrounding the new devices had yet to be established.
• The way students interact with technology and the institutional provision of technology, are both likely to become more diverse as mobile technologies and e-readers become embedded.
• Online is an unclear term and was understood to mean two different things: Actively linked to a network and interacting via the network; Making use of a digital device (whether or not a network connection was in use).
• The relationship between online and offline working was complex:
  - Students reported a wide variety of study practices which integrated both online and printed resources;
  - Online resources were integrated with printed materials in note taking practices.
Note taking processes were highly individualised student practices.

Our paper will focus on:

• the methodological approach adopted to collect this data
• a small number of issues from the full findings (including the changing picture in relation to mobility and e-book readers)
• the long term issue of a preference for reading printed materials and how this might be affected by the rapid adoption of mobile devices and e-book readers.
Digital games: Motivation, engagement and informal learning

Jo Iacovides
IET, The Open University
i.iacovides@open.ac.uk

Alongside the increasing popularity of digital games there is still much to be understood about the relationships between motivation, engagement and informal learning within this context. This talk considers the findings of the author’s PhD research in terms of how and what people learn from their gaming involvement.

The research included a conceptual analysis of motivation and engagement (reconceptualised as forms of micro and macro level involvement respectively) and three linked studies. In the first study, 30 players were interviewed via email about their gaming experiences. The resulting set of learning categories and themes drew attention to learning on a game, skill and personal level; arising from micro-level gameplay and macro-level interaction with wider communities and resources. The second investigation consisted of eight case studies that examined how involvement and learning come together in practice. Participants were observed in the lab during two gameplay sessions and kept gaming diaries over a three week period. Game-play was analysed with respect to breakdowns and breakthroughs while the previous categories and themes were also applied to the data. The findings suggested a relationship between macro involvement and player identity and so a third survey study (with 232 respondents) was conducted to further investigate the issue and establish the prevalence of different gaming activities on a wider scale.

The talk presents the learning categories developed and introduces the Gaming Involvement and Informal Learning framework in order discuss: (1) the range of learning experienced as a result of micro and macro involvement and (2) the importance of player identity; where the more strongly someone identifies as a gamer, the more likely they are to learn from their gaming experiences.
If you don’t know where you are going ... how do you know if you have arrived?

Adrian Kirkwood  
IET  
The Open University  
a.t.kirkwood@open.ac.uk

Several years ago, Margaret Cox and Gail Marshall (2007) argued that many questions remained unanswered regarding the effects of ICT upon students’ learning in school contexts. Having identified many weaknesses in the approaches adopted in research studies conducted over numerous decades, they asked “Do we know what we should know?” and identified “the need for a thorough, rigorous, and multifaceted approach to analysing the impact of ICT on students’ learning” (p.60). They were critical of the instruments and methods used in many studies, and also questioned some of the underlying assumptions made about learning, effects of different teachers’ pedagogical approaches and the particular types of ICT use. A recent review of research literature relating to the use of technology for teaching and learning in higher education (Price and Kirkwood, 2011) identified many similar concerns.

The proposed session will explore some of the methodological issues associated with research and evaluation studies that attempt to demonstrate enhancement of student learning or the student experience in higher education through the use of technology. Although much depends upon what teachers/researchers deem to be important (Kirkwood and Price, 2012), so often the nature of ‘learning’ is not made explicit: instead it is (erroneously) taken for granted that there is a common, shared understanding among teachers and among students. The session will draw attention to the limitations of various research approaches and question the usefulness or suitability of certain means of evidence collection that are commonly used. Above all, it will argue that greater clarity is required in specifying not only the desired or expected outcomes from any ‘technology in education’ study, but also the evidence deemed appropriate to demonstrate that those outcomes have been achieved.
References


Reading and discussing literature online: A Study on dialogue and online interaction

Chris Lima
CREET – FELS
The Open University
m.c.b.lima@open.ac.uk

This presentation will discuss preliminary findings of a study conducted for a doctoral degree at the Open University School of Education.

This investigation aims to analyse how members of an online reading group for English language professionals construct (a) their responses to texts read in the group, and (b) their narratives of group participation. In particular, to what extent and in what ways such responses and narratives are related to their contact with the literary text, the group interaction and the technology-mediated nature of the setting in which they occur. It will particularly focus on participants’ responses to the online environment.

Group interactions happen in a number of ways. First, there is the interaction between the individual reader and the literary text itself. Secondly, there is the interaction between Group members and the project coordinator, who plays the role of the reading circle facilitator. Thirdly, there is the interaction among group members. Apart from specific threads opened for TESOL groups to support face-to-face classroom activities and discussions, all the interactions mentioned above are technology-mediated. This fact is extremely relevant in terms of the meditational tools available to participants, the possibilities and constraints of the online environment (affordances), and the development of new forms of literacy. Moreover, the British Council/ BBC website not only gives the Group a worldwide exposure and reach, but also ties it to institutional rules, priorities, policies and also, the public image of both institutions.

It is expected that the findings will help us to better understand the nature and extent to which contact with and discussion of literary texts through computer mediated communication affect how people construct their narratives and build up their professional discourses. It may also give us some ideas about how similar online projects may be implemented to promote reading and literacy among both language teachers and learners.
This presentation will include:

- Background information on the research setting
- The methodology and the data collection tools used
- The data analysis
- Preliminary findings
- Questions & Discussion
“With the lights out, it’s less dangerous”: tapping into teen spirit to inform technology design for personal energy consumption understanding

Rose Luckin

London Knowledge Lab

rose.luckin@gmail.com

In this presentation I’ll report on a series of research studies conducted with teenagers to develop design ideas for ways in which learning technologies might support young people who want to learn and understand more about their personal consumption of energy. Energy sustainability is prevalent in political and popular rhetoric and yet energy consumption is rising. Teenagers are an important category of future energy consumers, but little is known of their conceptions about energy and energy saving.

Findings from our early studies suggest that teenagers are aware of energy issues at an abstract level, but do not apply this information in the context of their behaviour. We identify indirect energy use and the relative energy intensity of different behaviours as important areas for learning. For example, behaviours of particular relevance to teenagers are use of electronic devices, and choice of food and personal care products. These findings have implications for the design of technology to support learning about energy in informal contexts and have informed the development of an Ecology of Resources model (Luckin, 2010) of the teenage participants’ personal contexts, which includes their world resources (people, tools, knowledge, skills, and environment) and their personal resources (conceptions, motivations and concerns around energy consumption). This model is now being used to support the on-going participatory technology design process with groups of teenagers drawn from UK secondary schools.

I’ll talk about the range of methods we employed to understand teenagers’ personal learning contexts and the manner in which our findings are now being used to develop a mobile phone application with a small group of teenagers in two secondary schools in the South of England.
Gender in Online Science and Technology: Understanding the gap between narratives and texts

Heather Mendick, School of Sport and Education, Brunel University
heathermendick@yahoo.co.uk
Marie-Pierre Moreau, University of Bedfordshire

This paper looks at online representations of women and men in science, engineering and technology. We show that these representations largely re/produce dominant gender discourses. We draw on interview data with young people to argue that these constrain the meanings made by web users. We then focus on the question: how are gender-clichéd images re/produced online? Drawing on a discursive analysis of data from six interviews with science and technology web authors, we argue that there are two reasons why their awareness of gender issues does not always translate into website content. First, web authors think of themselves as working within either journalistic or scientific/technological cultures, and draw on associated criteria which exclude gender equity, to make content decisions. Second, they construct distinctions between representation and reality, judging representations on their ‘empirical realism’ (how accurately they represent a reality seen to exist outside the text), foreclosing considerations of their productive power.
Supporting learners in mobile discovery of library resources

Keren Mills
MACON project manager and Digital Services Development Officer
Library Services, The Open University
K.Mills@open.ac.uk

The Macon project (Mobilising Academic Content Online) aims to address the challenges involved in delivering quality academic content to mobile phones and small tablets in a seamless and user-friendly manner. The project is working with EBSCO, a major content and systems provider, to prototype a mobile optimised resource discovery interface which can be used to discover and expose quality academic content from both third party & local collections. Local collections included the Open University’s Open Research Online (ORO) repository and audiovisual content from podcast.open.ac.uk. The project uses a combination of the API from EBSCO Discovery Solution (EDS) and open source software (Mobile Web from MIT and the Open University’s Open Media Player).

The development of the interface has been heavily influenced by user requirements and by external recommendations for good practice in mobile usability. The prototype systems are being evaluated to ascertain the usability and quality of the user experience.

The project will also produce a ‘good practice’ toolkit for content providers which documents the rewards, risks and barriers involved in making academic content accessible to mobile devices. This presentation will discuss the methods used by the library for gathering user requirements and ensuring that our support offerings meet learner needs. It will also share the lessons learnt in the process.
Old learning habits and new technologies: the impact of choice, control and identity in the learning experiences of novice adult students using ICT

Alice Peasgood
Centre for Inclusion and Curriculum
The Open University
a.peasgood@open.ac.uk

This study highlights the role of ICT in potentially disrupting a learner’s journey through the early stages of distance education at HE level. Adult learners entering distance education at HE level encounter a learning environment and learner support which are increasingly technologically mediated. In becoming university students, they are often expected to engage with ICT tasks designed around some explicit (or implicit) assumptions, which may not fit their situation or preferences. This study combines a thematic analysis of semi-structured interviews with a cluster analysis of survey responses to identify four distinct learner identity-types based upon use of ICT in daily life and for learning. The findings suggest that experienced learners new to ICT may have well-established habits and may attempt to incorporate new technologies into their familiar study patterns. This does not always work, and may lead learners to feel a loss of control and thus to reject the technologies in some circumstances. The study indicates that a student who is more experienced in ICT-mediated learning has an identity that better fits the typical assumptions of learning designers. This raises questions about the transition from novice ICT-learner to expert user and what may facilitate or hinder this process. There is a need to recognise learner identity as an important factor that may, in some cases, increase the likelihood of non-engagement with new technologies and thus increase the risk of non-completion of the course.
RadioActive: Informal Learning and Employability through Internet Radio and Social Media

Andrew Ravenscroft
CASS School of Education and Communities, University of East London, UK.

a.ravenscroft@uel.ac.uk
http://www.uel.ac.uk/cass/staff/andrewravenscroft/

This research and development project is a new approach to conceptualising, designing and developing social media for informal learning within ‘lived communities’. It embodies the key pedagogical ideas of Paulo Freire and his notion of transformational (or emancipatory) learning through lived experience. These are applied to promote the engagement, informal learning and employability of disenfranchised young people through internet radio and social media. The project is also inspired by musical revolutions as varied as the birth of blues, punk, hip-hop and acid-house, and what Orson Welles called ‘the confidence ignorance’. Exploring rich and varied personal and community identities, and promoting their articulation, expression and positive transformation, are pivotal to RadioActive. It embodies a new approach to social media design - that is conceived as an intervention in existing digital and mixed-reality cultures. The fundamental idea is to catalyse, organise and legitimise the digital practices, content production and critical and creative potential of disenfranchised young people to provide a new and original community voice. This voice will combine the intimacy, relevance and ‘touchability’ of local radio with the crowd sourcing power of social media. Critical and creative cultural development, embracing the underground and challenging the status quo through the expression of lived experience are all at play.

“It’s like a jungle sometimes it makes me wonder how I keep from going under”
(Grandmaster Flash and the Furious Five, 1982).

This talk will: describe the rationale and pedagogical approach to design; the methodology for developing the RadioActive platform; our experiences and insights from a pilot project and a larger project (funded by Nominet Trust); and the broader implications for this and similar projects, when we consider the reality of designing learning for ‘lived’ communities cultures.
The ‘Gamification’ of GIS for teaching and learning

Thiemo Romey, Anne Adams, IET
Tom Argles, Department of Earth and Environmental Sciences
The Open University
T.Romey@open.ac.uk; A.Adams@open.ac.uk; t.w.argles@squiggle.open.ac.uk

Geographic information systems (GIS) are powerful tools that help us make sense of geographic data. These systems take different forms, ranging from functionally simple interfaces (e.g. Google Maps) to complex, comprehensive analytical toolkits (e.g. ESRI ArcGIS), but all of them let us integrate, manipulate, analyse and also visualise geographically referenced data from disparate sources. Hence, a GIS allows us to put geographic data into context. The result is accessible geographic information that helps us make decisions and solve a wide range of spatial problems.

In particular, a GIS can support ‘sensemaking’ for teaching and learning purposes through contextualising information and scaffolding small group augmentations. Furthermore, mobile GIS can increase sensemaking by linking abstract concepts in-situ to fieldwork activities. The elements of GIS that appear to be particular beneficial for teaching and learning are those that relate to the whole learning experience and how a learner develops their conceptual understanding through that experience. However, the efficiency and usability of these systems has been limited by a poor understanding of exactly how GIS relates to the learner’s experience and their developing conceptual understanding.

In contrast to GIS, games systems have focused research on understanding the gamer’s experience and, when used for learning purposes, their supported progression through understanding concepts. ‘Gamification’ has been employed as a term to describe the process of bringing gaming elements into the design of non-gaming systems. These elements can vary from the simplistic use of reward and reputation systems (badges, points, levels, leaderboards) to abstract concepts of ‘funology’. More recent research has merged gaming with virtual world research to unpick cognitive issues relevant to the design of systems for learning and sensemaking.
This paper presents work-in-progress with results from 118 participants in an online questionnaire detailing spatial concepts for GIS system. These are related to the design of GIS for learners’ experiences and their conceptual understanding. Finally, initial developments and walkthroughs will be presented on the gamification of GIS with GIS maps translated into 3D gaming and virtual worlds. Discussions around the roles of ‘flow’, ‘immersion’ and ‘1st person perspectives’ for GIS experiences will be explored.
The iTunes U at the OU learner

Fernando Rosell-Aguilar
Department of Languages, The Open University
f.rosell-aguilarg@open.ac.uk

iTunes U was launched in 2007 as a repository of digital educational material provided by Universities in the US. In 2008 the OU joined the service and now hosts more than 350 collections of materials (audio, video, eBooks). Since its launch, iTunes U has delivered over 300 million downloads. Of these, 34 million are from iTunes U at the OU. Despite its popularity, little is known about the type of user who downloads iTunes U resources, or their use of the resources. This paper will present the results of a major survey of users of iTunes U at the OU. The survey ran for 20 months and collected more than 2000 responses. The paper will provide data on the kind of user who downloads iTunes U at the OU resources, what they do with the materials they download, and what they think of them as a learning resource.

The popularity of portable media players and podcasting has increased enormously in the last few years. Some researchers were quick to identify the potential uses and benefits of podcasting for learning. Among these is the fact that the materials are delivered in a format that is portable, convenient and easy to use as well as easy to access. To a large extent, the quick take-up of podcasting as a new technology was due to the success of the iTunes software for the delivery and management of audiovisual resources. iTunes U was launched in 2007 as a repository of digital educational material provided by Universities in the US. In 2008 the OU joined the service and now hosts around 400 collections of materials. Since its launch, iTunes U at the OU has delivered over 52 million downloads.

The fact that a large number of resources are regularly added to iTunes U by top universities worldwide has been heralded as a new way of providing unprecedented access to lectures and materials created by top experts in their fields. In most cases, the materials have been designed with the universities' own students in mind, but when they are uploaded to iTunes U, they find new and different audiences. Effectively, the providers are teaching strangers. Whereas previous literature on podcasting has focused on users who utilise resources
provided by their own lecturers, little is known about the end-users of iTunes U resources and what they do with them.

This paper reveals some characteristics of the iTunes U user through a large survey which was carried out over 2 months and collected over 2000 responses. It provides a profile of the end user, their practices and opinions about materials. The data shows that the type of user who downloads iTunes U resources in this context is very different from the users and practices described in the literature so far. This profile of the iTunes U user provides a clearer picture of the target listener and can help inform and improve the materials design and delivery strategies for iTunes U.
Can a computer marked exam improve retention?

Jon Rosewell
Communication & Systems Department, Faculty of Maths Computing and Technology
The Open University
j.p.rosewell@open.ac.uk

Open University distance learning modules may show poor retention compared to traditional campus courses, particularly for introductory and enrichment modules that are not core to a qualification. Folk wisdom is that exams and end-of-module assessments (EMA) represent a significant hurdle to students who appear to be deterred by the perceived difficulty and do not submit. On the other hand, computer-marked assignments (CMA) presented either as formative or summative parts of the module’s continuous assessment, are typically attempted by most students particularly when delivered in interactive online ‘quiz’ format (iCMA). Can retention on a module therefore be improved by offering part of the end-of-module assessment in the form of an interactive quiz (iCMA)?

The specific context to be explored is the Open University module Robotics and the meaning of life (T184), a 10-point, 10-week module general interest module. The previous assessment strategy for this course comprised a mid-course iCMA and a final written EMA which included short-answer questions, an extended question on robot programming, and a short essay on recent developments in robotics and their the social and ethical implications. For the last two presentations of this module, the end-of-module assessment took the form of a further iCMA (corresponding to the short-answer questions of earlier EMAs) and a reduced written script-marked EMA (retaining the programming and essay questions). The new final iCMA was presented in the same format as the mid-course iCMA, but was formally treated as a computer-marked exam. An additional benefit of this change was that students were given detailed feedback on their computer-marked exam immediately after the final submission date, rather than the anodyne performance profile previously provided with the final result some months later.

The hypothesis to be tested is that this change will result in improved engagement and confidence, feeding through to improved retention and progression measures.
Measures looked at:

- standard module measures of submission, retention and progression;
- patterns of submission;
- structured interviews with a sample of students.

Comparisons can be made with both pre-intervention presentations of the same module and with other companion modules whose assessment strategy has not changed.
Next Steps for Excellence in the Quality of e-Learning

Jon Rosewell, Karen Kear and Keith Williams
Communication & Systems Department, Faculty of Maths Computing and Technology
The Open University

j.p.rosewell@open.ac.uk; K.L.Kear@open.ac.uk; K.Williams@open.ac.uk

The development of e-learning has progressed to a stage where it is becoming part of mainstream provision in higher education. Therefore the issue of assessing and sustaining the quality of e-learning must now come to the fore. Quality assessment in higher education is well-established in relation to learning and teaching generally, but what methods can be used to establish quality in the domain of e-learning?

The E-xcellence methodology for assessing quality in e-learning (EADTU 2009) is securing recognition by European and international learning organisations. It was designed to be applied to the design and delivery of e-learning in both distance learning, and blended learning contexts. It supports a range of uses, from accreditation by external agencies to process improvement through internal review.

The methodology presents principles of good practice in six domains of e-learning: strategic management; curriculum design; course design; course delivery; student support; and staff support. A total of 33 benchmark statements cover these domains, and are supported by a handbook for practitioners and guidance for assessors. The handbook includes principles for quality e-learning and exemplars of good practice. Amongst the tools is an online ‘QuickScan’ self-evaluation questionnaire based on the E-xcellence benchmarks which is highly valued as a focus for collaborative review of e-learning programmes.

The e-learning landscape has changed since the E-xcellence methodology was first developed. In particular, the use of Open Education Resources (OECD 2007) and the application of social networking tools (Mason & Rennie 2008) were not explicitly considered in the original benchmarks. Accordingly, the E-xcellence NEXT project was instigated to produce and evaluate a revision of the benchmark criteria, associated handbook and
exemplars. This paper describes the project process and initial recommendations.

A consultation exercise was carried out among E-xcellence participants. Feedback from this was brought to participatory workshops at a European Seminar on QA in e-learning in June 2011. Following this exercise, the benchmark statements were revised and are now available in beta version.

The project resources (QuickScan and manual) are being used for a series of self-evaluation and assessment seminars held at European higher education institutions. Feedback from these assessment seminars will be used to finalise materials for publication late in 2012. At that point the E-xcellence Next project will offer to the higher education community a set of self-evaluation and quality assessment tools which are fully updated to encompass social networking, Open Educational Resources and other recent developments in e-learning.

References


doi:10.1787/9789264032125-en

Learning with Technology In, About, Through and Despite Context

Mike Sharples
IET, The Open University
Mike.Sharples@open.ac.uk

This presentation examines the experience of learning with technology in relation to context. To ensure that the technology enhances learning rather than impedes it, we need to understand context from the perspective of the learner. We propose four perspectives on context: learning in context; learning through context; learning about context; and learning despite context. These should not be seen as mutually exclusive; rather, they indicate a need for integrative and adaptive technology that supports learners in their efforts to understand and respond to changing contexts as they construct meaning within and across time, space and social settings.
How is evidence-based literature informing e-Assessment practice: Findings from an HEA project

Denise Whitelock
IET, The Open University
d.m.whitelock@open.ac.uk

One of the main drivers for Learning has long been acknowledged as the Assessment that students must undergo during the course of their studies (Rowntree, 1987). The “backwash effect” of assessment (Biggs, 1996), such as “students only learn what is assessed”, highlights how the results influence certain assessment practices. There is now a sea change in attitudes to assessment where, quite rightly, the role of assessment is focused to support student learning (Assessment for Learning Group, 2002). Providing students with constructive, timely and “easy to understand” feedback is taking centre stage in this new culture of assessment (Havnes & McDowell, 2008) and has gained increased interest throughout the HE Sector with the advent of electronic assessment.

There is now a growing body of literature about the role that electronic assessment and feedback is playing in the HE Sector and one of the salient questions of the day is how is this literature informing practice to support student learning?

This paper reports on a study commissioned by the Higher Education Academy and undertaken by The Open University and the University of Southampton to investigate this question through addressing the following:

1. Consult the academic community about which references on assessment and feedback with technology enhancement are most useful to practitioners
2. Prioritise evidence-based references i.e. those that are peer reviewed and have data to support their practice
3. Synthesise the main points from these references
4. Provide signposts for readers to locate the original documents for further study

The aim of this desktop research was to support the Higher Education Sector in its use of technology to enhance learning and teaching by providing a comprehensive and useful synthesis of evidence based practice in this domain.
The findings revealed that the majority of publications were practitioner-led case studies. The references that were recommended to the team were clearly having an impact on current practice and were found to be valuable by the practitioners. The key messages from these case studies were consistent and often gave detailed and practical guidance for other academics. Most of the recommended literature focused on the objectives that can be met using technology-enhanced assessment and how the assessment and feedback loop can be designed to make best use of the technology.

References


