13th Annual Conference of the Irish Learning Technology Association

EdTech 2012
Digital Literacies for Life

31st May – 1st June 2012
NUI Maynooth

Book of Abstracts

www.ilda.ie
Organising Committee

The Conference Organising Committee is pleased to announce that EdTech 2012 will be hosted by the Irish Learning Technology Association (ILTA) in association with NUI Maynooth.

The 2012 organising committee is as follows:

Paul Gormley (ILTA chair)                  NUI Galway
Nuala Sweeney                                ILTA
Catherine Bruen                             Trinity College Dublin
Claire McAvinia                              NUI Maynooth
Muireann O’Keeffe                           Dublin Institute of Technology
Jen Harvey                                   Dublin Institute of Technology
Miriam Allen                                National Digital Learning Resources (NDLR)

Programme Committee

We would also like to thank the programme committee for acting as reviewers for conference submissions:

Simon Ahern                                 NUI Maynooth
Frances Boylan                              Dublin Institute of Technology
Catherine Bruen                              Trinity College Dublin
Nathalie Cazaux                             Institute of Technology Blanchardstown
Fiona Concannon                             NUI Galway
Marita Coughlan                             Institute of Technology, Tallaght
Martina Crehan                               Dublin Institute of Technology
Catherine Cronin                            NUI Galway
Alison Egan                                 Marino Institute of Education
Eilis Flanagan                              NUI Galway
Carina Girvan                               Trinity College Dublin
Matt Glowatz                                University College Dublin
Mark Glynn                                  Institutes of Technology Ireland
Paul Gormley                                NUI Galway
Helen Guerin                                University College Dublin
Jen Harvey                                  Dublin Institute of Technology
Bonnie T. Long                              NUI Galway
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Welcome from NUI Maynooth

President’s Welcome

I would like to welcome you formally to NUI Maynooth for EdTech 2012, the annual conference of the Irish Learning Technology Association. We are delighted to host this event here for the first time, and wish you a productive and enjoyable conference.

While the University can trace its roots to 1795 with the establishment of the Royal College of St. Patrick in the town of Maynooth, today NUI Maynooth is a place of lively contrasts, combining the peaceful and historic beauty of fine eighteenth-century buildings with the dynamism and excitement of modern research and teaching facilities. The University has seen its student body grow rapidly in recent years to more than 8,800 students. Flexible methods of learning, and the broad geographical area from which students travel to study here, have led to extensive use of new technologies in supporting the student learning experience. Technologies are also integrated in our lecture theatres and teaching spaces, forming an essential part of learning and teaching while students are on campus.

The diversity of our student population highlights the importance of digital literacies to their learning, and it is particularly appropriate that EdTech should take this theme as its focus in the year that we welcome the conference to Maynooth.

Mass participation in higher education presents significant challenges for us as educators, and educational technology presents extraordinary opportunities to address these challenges. The institutions that embrace these opportunities will set themselves apart and set a new standard.

Accommodating the range of learning styles and preferences our learners have, recognizing prior learning and life experiences, and addressing the many different levels of experience with regard to information and communications technology, are significant challenges. We have sought to address these challenges not only by providing resources to students in terms of equipment and software, but also through supports for their learning including their use of technology. In this process, we
learn much from collaborating with our colleagues in other institutions, and particularly through networks such as ILTA. EdTech provides an ideal forum for us to share our approaches and experiences in delivering the best learning experience we can.

NUI Maynooth is currently undertaking further development of its campus, and enhancing the teaching and learning spaces we provide. Technologies will have a vital role in these exciting new developments, and the conference provides a timely space itself for discussion of how best to exploit these new resources for teaching, learning and assessment.

I would like to congratulate the Irish Learning Technology Association for organising what promises to be an exciting and stimulating conference this year. Once again, I welcome you all to NUI Maynooth and wish you an enjoyable and memorable visit.

Professor Philip Nolan
President
NUI Maynooth
Dear Delegate,

ILTA warmly welcomes you to EdTech2012, the thirteenth annual Irish Educational Technology Users’ conference. We are delighted that this year’s event is hosted by our colleagues in NUI Maynooth (NUIM), whose excellent facilities will ensure that you have an exciting, productive and enjoyable experience over the coming days.

The conference theme is ‘Digital Literacies for Life’ where we invite you to address this key issue from practitioner, research and policy perspectives to identify, develop, apply and promote the digital skills, competencies and literacies required for education in the 21st century. ILTA has proposed the adoption and promotion of ‘Digital Literacies’ as a key theme to underpin the establishment of the HEA National Academy for the Enhancement of Teaching and Learning as we consider how the educational sector responds to the opportunities and challenges presented by the modern digital age?

During the conference, we look forward to lively interactive sessions, showcases, and presentations, combined with plenty of informal networking activities in the presence of our wonderful keynote speakers:

- **Doug Belshaw**, Researcher/Analyst at JICS InfoNet
- **Martin Oliver** and **Lesley Gourlay**, London Knowledge Lab, University of London
- **Martha Rotter**, Co-founder and publisher of IDEA Magazine, Manager of OpenCoffee and innovation blogger.

**Free Conference Workshops @ EdTech2012**

Based on participant feedback from previous EdTech conferences and ILTA Group LinkedIn discussions, we are delighted to offer EdTech2012 delegates the opportunity to avail user-and vendor-facilitated free 50 minute workshop sessions on Friday afternoon from 2:00 unit 4:00

Amongst the hot technologies you can engage with are: iBooks Author, Adobe Connect, OnSynch meeting rooms, and Moodle 2. You are also invited to practical theme-based workshops covering ePortfolios, screencasting, online meeting room best practice, and online assessment and feedback.

**Our Sponsors and Exhibitors**

We have been overwhelmed by the generosity and support of our industry partners in supporting EdTech2012 in these challenging times. Our industry partners are an integral part of our community...
and we sincerely welcome their participation in this year’s conference. Check out their wares at the Thursday morning **Elevator Pitch presentation** and make sure to help them feel at home by visiting our sponsor and exhibitor stands for engaging demonstrations and discussions.

**The Jennifer Burke Award for Innovation in Teaching and Learning**

A highlight of the conference will be the presentation of the fourth Jennifer Burke Award for Innovation in Teaching and Learning to Dr. Derek Molloy (DCU) for his excellent ‘Real’ Electronics Independent-Learning Experiments project. We are delighted that Derek, along with other short-listed colleagues will showcase their projects to conclude day 1 of the conference. We are particularly delighted to welcome Dr. Muiris O’Connor, HEA Policy Unit, to EdTech2012. Muiris has been a judge on the JB Award panel and a great supporter of this initiative since its inception, and will form part of our **plenary panel session on Friday**.

**Irish Learning Technology Association Strategy and Direction**

The ILTA Steering Group was formed at EdTech, and has outlined the priorities and direction for ILTA over the medium term. We thank them for:

- Identifying the **EdTech2012: Digital Literacies for All** theme
- Ensuring that the **practitioner voice** is at the forefront of the conference
- Prioritising **key research activities** that ILTA will support over the coming years (e.g. a national student VLE survey which will be presented on Friday as part of the research strand; and a new technology-enhanced learning survey to be commissioned in October 2012)
- The establishment of a **new ISBN technology-enhanced ILTA journal** to be launched on October 22 by Dr. Larry Ragan, Director of Academic Development at the World Campus, Penn State University
- Progressing the **ILTA legal status** towards a Company Limited by Guarantee

The **ILTA AGM** will take place during lunchtime on Friday 1 June. All welcome!

Finally, we thank you – the **EdTech2012 participants** - for ensuring that ILTA and EdTech continues to reflect the topical grass-roots user-driven interests, concerns and issues of the technology-enhanced community in Ireland. We welcome this opportunity to reflect and celebrate with wonderful achievements of our local and international community as we engage in lively discourse throughout **EdTech2012: Digital Literacies for Life**.

We hope that you have a productive, fun and invigorating conference.

Paul Gormley  
Chair, Irish Learning Technology Association  
On behalf of the ILTA Executive
## Sponsors & Exhibitors

We wish to thank the following sponsors and exhibitors of this year’s event:

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Blackboard

Building a better education experience

Blackboard.com/EMEA

Blackboard is a global leader in enterprise technology and innovative solutions that improve the experience of over 20 million students and learners around the world every day. Blackboard’s solutions allow more than 9,300 higher education, schools, professional, corporate, and government organisations in over 40 countries to extend teaching and learning online, facilitate campus commerce and security, and communicate more effectively with their communities.

Blackboard brings together several platforms that serve to deliver more than just a learning platform. Through deep integrations many exciting technologies can be accessed in sync with the learning environment. We can bring a social and interactive learning experience to remote students; deliver course content and campus information to mobile devices; connect students, the institution, and the wider community with mass two-way communication tools; and after all of this is done, help you to transform the data into actionable information enabling you to make informed decisions and improve institutional performance.

Blackboard works with clients to develop and implement technology that improves every aspect of education. We enable clients to engage more students in exciting new ways, reaching them on their terms and devices—connecting more effectively, keeping students informed, involved, and collaborating together. Through this innovative technology, services and expertise we work with our clients to build a better education experience.

Learn more about Blackboard at Blackboard.com/EMEA or come and visit us at the Blackboard stand.
The Only Collaboration Platform Built for Education

Blackboard Collaborate delivers open, education-focused collaboration that enhances learning, reduces costs, and improves outcomes by enabling anywhere, anytime, instruction, meetings and help. Our comprehensive solutions empower you to collaborate your way with Web, video, and audio conferencing; presence and instant messaging; and content creation and social learning.

Blackboard Collaborate provides a learning and collaboration platform to thousands of higher and further education, schools, professional, corporate, and government organisations worldwide. Students, teachers, trainers, and administrators use these solutions every day for online, blended, and mobile learning that transforms education.

Why Blackboard Collaborate?

Our clients use the Blackboard Collaborate for many purposes including: lecture capture, classes, guest lecturers, virtual office hours, tutoring and mentoring, student orientation, peer collaboration, help, meetings, webinars, training and professional development. Blackboard Collaborate will enable you to:

• Improve the quality of your learning offerings and student achievements
• Integrate within your eLearning environment to facilitate adoption
• Increase enrollment by opening courses to remote students
• Improve retention by making online courses interactive
• Save money by reducing or eliminating travel and related expenses
• Enable communication between different campuses

For more information, visit blackboardcollaborate.com or visit us at the Blackboard stand.
About Echo360:
As a global leader in blended learning and lecture capture products, Echo360 helps higher education institutions keep pace with modern students’ learning needs through products that digitally record and upload learning content. Echo360 has been recognized with a Product Line Strategy of the Year Award from Frost & Sullivan and named a Visionary Vendor in Educational Technology by IT research firm Basex. Echo360’s products facilitate better instruction for large collections of students, lower costs and enrich learning experiences by enabling students to easily access and share multimedia content. Through Echo360’s platform, students can replay recorded sessions and review information from instructors online, at their convenience and across various devices. More than 500 colleges and universities in 30 countries use Echo360’s solution.

Mobile Products:
Go Anywhere. Learn Everywhere. Tablets and smart phones are the next wave in education technology, and the EchoSystem is ready. It’s the first blended learning solution with a player designed exclusively for the Apple® iPad™. And for on-the-go learners, the EchoSystem safely streams content to any Apple iOS or Android device.
Enovation Solutions

Enovation Solutions is a technology and management consultancy providing specialist and bespoke services since 2000. With offices in Dublin and Paris, Enovation is enjoying strong growth in Europe and further afield. As one of the largest Moodle partners worldwide, we are leaders in the provision of eLearning solutions based on open source technologies across a broad spectrum of clients and sectors.

Education & training

Using proven and stable open source products we provide bespoke and tailored solutions to help our clients manage and deliver online learning and foster collaboration among their staff or learner cohort. In this way we cost effectively offer greater levels of functionality and flexibility than can be achieved from expensive proprietary solutions.

- Learning Management Systems
- Online Portfolios
- Content Management
- Collaboration portals

Digital archiving

We have built up considerable expertise around digital content storage and management. Using open source technologies we implement online document management solutions to allow for tracking, workflow and version control for trusted document exchange. In a research context we develop open access research repositories which can be searched and harvested over the internet.

- Research repositories
- Learning content repositories
- Document management solutions
HEAnet is Ireland’s National Education and Research Network and provides cutting edge Internet and associated ICT and e-Infrastructure services to Educational and Research organisations throughout Ireland.

HEAnet’s e-Infrastructure services underpin academic research and education activity in Ireland with approximately 200,000 students and staff (third-level) and approximately 800,000 students and staff (first and second-level) relying on the HEAnet network each day for their learning and research needs.

It is HEAnet that connects these Irish learners and researchers to the Internet, online educational resources, and to fellow national educational and research networks in Europe, the USA and the rest of the world.

Established in 1984 by the Irish Universities with the support of the Higher Education Authority, HEAnet today provides an essential e-Infrastructure service across all levels of the Irish education system. Our very high bandwidth network connects all Irish Universities, all Institutes of Technology, other higher education institutions (HEIs) and research organisations, in addition to all primary and post-primary schools across Ireland.

HEAnet is committed to delivering, supporting and maintaining the most cost-effective and technically advanced e-Infrastructure and services to meet the needs of its user community. All HEAnet services are provided with high availability and resilience and are IPv6 and IPv4 compatible. Cost-efficiency is at the heart of the HEAnet operation as its core mission statement is to deliver value for money.

For more details, visit our website: www.heanet.ie
National Digital Learning Resources (NDLR)

The National Digital Learning Resources (NDLR) service is a unique inter-institutional community, fostering the sharing and exchange of teaching and learning experiences, practices and resources and collaborative research and development initiatives across the Irish Higher Education sector. The Service promotes and supports the sharing and creation of digital learning resources amongst the academic community in Ireland. The NDLR currently hosts over 27,000 digital resources across many subject areas from images, podcasts, videos, presentations, and documents to more complex learning objects and content packages. The types of resources include such things as exam questions, exercises, course notes and interactive tutorials. All resources are free to use and repurpose to suit your own requirements under the Creative Commons licences.

Why use the NDLR?

Provides an easy to search collection of teaching content which:

- Can save you time by using or repurposing existing material
- Is legal to use
- Can be integrated into your own courses without significant effort
- Is contextually relevant to Irish HE
- Is developed by you or your peers in other institutions

The NDLR also provides a medium through which to interact and collaborate nationally in a community involved in the teaching of your subject area
The NDLR actively supports the dissemination of your research and teaching discipline through the repository but also through its training and events.

10 things you can do with the NDLR service

1. Find and share learning resources for your teaching
2. Get in touch with other academics in your subject area
3. See what initiatives are taking place in Higher Education
4. Present your teaching experiences and research to a national audience
5. View the NDLR national funded digital resource projects
6. Join a SMART Community of Practice
7. Get support and help developing learning resources for your subject
8. Find out about national events and training
9. Know your rights – copyright and IP
10. Funding opportunities and NDLR Publications

For more information please email us at info@ndlr.ie
Student Mobile Broadband in Ireland

O2 are delighted to support the Edtech conference here in Waterford, and wish all involved every success with the event, as we see technology playing an increasingly important role in education. Having mobile broadband in Ireland is crucial for students; and so O2 has made it even easier to ensure all students are able to get set up with mobile broadband with some of the best mobile broadband deals available. Offer are available for students with O2 and HEAnet for mobile broadband from €9.95 per month.

Select the best mobile broadband contract that will work for you. Contract length for the €9.95 monthly plan is 12 months.

Additionally, check to see when we will be visiting your college on www.campus.ie. To discuss your options, simply call in to any O2 store so you can avail of the best mobile broadband deals we offer.

*All O2 Broadband Plans have a data usage limit and a charge of 2c per MB applies for all usage in excess of the data usage limit on your plan.

Wireless Routers

Please note the wireless routers supplied for the conference are available to purchase in store, and are an excellent wifi resource, in addition to boosting performance and coverage in the home or office.

Contact details:

Website: http://www.o2online.ie
Typetec Education supports Irish educational institutions as they integrate ICT into teaching, learning and assessment.

www.typetec.ie/ict-in-education

Collaborate www.collab8.com specializes in virtual learning and collaboration solutions, and have been solely focused in this market consistently, since the inception of web conferencing technology and therefore have in-depth experience which we believe no other company can offer. We have been involved in many successful web conferencing deployments including Universities of Cambridge, Hertfordshire and Bath; as well as Northern Ireland and Scottish Schools to name but a few.

Unlike single product vendors, our unique focus & experience means we are able to assist you in identifying and prioritising virtual learning and collaboration solutions, which will meet your current and future needs, and then recommend the ideal “best in class” solution & services whilst ensuring a swift and successful adoption process.

Collaborate were the UK Sales & Marketing team behind many UK successes, we previously represented solutions such as Elluminate, Marratech and others. We are therefore confident that our recommendation to move to Adobe Connect will bring substantial benefits to your organisation for many years to come.
Technical Information

Conference Wifi

Windows XP Wireless Connection
Windows XP has an icon for managing your wireless adapter on the bottom right toolbar.

Click on the XP wireless network icon to see what networks are available.
Double click on the CONF signal if you are not already connected. Enter the password welcome-2-nuim-726354.

Mac OS X Wireless Connection
Ensure that the wireless radio is turned on by clicking on the Airport icon and then choosing “turn Airport on”.

Click on the Airport icon and click CONF, there will be a checkbox beside CONF if you are already connected.
The required password will be welcome-2-nuim-726354.

Vista/Windows 7 Wireless Connection
Left click on the network icon on the bottom right toolbar; it looks like 2 computers next to one another.

This should bring up a menu where you can choose the option to Connect or disconnect...

You can then view which networks are available to you. Choose CONF and select the Connect button on the bottom right. Enter the password welcome-2-nuim-726354 to connect.

Note: The key is all lowercase, wireless clients need to support wpa with tkip encryption and 128bit keys.
Social Networking

Edtech 2012 on Twitter  #edtech12

ILTA on Twitter  #ILTAtweets

Join the ILTA group on LinkedIn™  ILTA group
Keynote Speakers

Martin Oliver

Martin Oliver researches uses of technology in higher education, with particular interests in how people make sense of the technologies they encounter and use them to support their educational aims. He also studies learning in the context of virtual worlds and digital games. Martin is a Reader in ICT in Education based in the London Knowledge Lab, a research centre at the Institute of Education, University of London; he is Chair of the Association of Learning Technology (www.alt.ac.uk); and serves on the editorial boards of Research in Learning Technology; Learning, Media and Technology; Research and Practice in Technology Enhanced Learning; and Innovations in Education & Teaching International.

Lesley Gourlay

Lesley Gourlay is a Senior Lecturer in Contemporary Literacies in the Department of Culture, Communication & Media, and Director of the Academic Writing Centre at the Institute of Education, University of London. Her background is in Applied Linguistics, and her current research interests include academic literacies, multimodality and digital mediation in higher education, focusing on meaning-making, textual practices, digital literacies and multimodality. She also works in the area of boundaries, transitions and trajectories in HE, looking at issues such as internationalisation, support staff, practitioner-lecturers and 'non-traditional' students. She is currently leading a JISC-funded project on Digital Literacies at the IOE.

Martha Rotter

Martha Rotter is the developer and co-founder of Woopie, a platform to create beautiful digital publications. In December 2011, she recently launched her own online publication for the Irish technology community, Idea Magazine. Martha is a web developer living in Dublin, Ireland, and splits her time
between her startup projects, freelance web development work, and lecturing at the National College of Ireland and the Digital Skills Academy. Outside of development, Martha works with technology-focused community organizations including OpenCoffee Dublin and Age Action.

Doug Belshaw

Doug Belshaw is a Researcher/Analyst at JISC infoNet researching Digital Literacies, Mobile Learning and Open Educational Resources. He is part of the JISC Programme Support team for Digital Literacies and recently completed and successfully defended his doctoral thesis in this area. As an open educator, his thesis was available online as he wrote it and can now be found at http://neverendingthesis.com. In order to make his academic work even more accessible he is writing an e-book called The Essential Elements of Digital Literacies. This can be found via his website at http://dougbelshaw.com.

Prior to working at JISC infoNet, Doug was Director of e-Learning at large Academy for ages 3-19 in the north of England, and before that taught History and ICT. As such, he has a great interest in education at all stages and believes we need to question why we do what we do. Doug is co-kickstarter of Purpos/ed, an organisation that exists to provoke and sustain debate around the question, "What is the purpose of education?" (http://purposed.org.uk)

EdTech Plenary Panel

The EdTech Plenary Panel discussion will feature education, government and industry representation to discuss the future of the Irish and international technology-enhanced landscape. We are delighted that the panel will include Dr. Muiris O’Connor from the Higher Education Authority Policy and Planning Unit, and look forward to discussing the establishment of the National Academy for the Enhancement of Teaching and Learning, amongst other key teaching and learning topical issues, with our panel members.
Short Paper Abstracts

"Shall I press record?"

Laura Widger (Waterford IT)

Abstract
As new tools and technologies emerge, many have been identified as having a potentially revolutionary impact on traditional education. For some this promise has been fulfilled, although sometimes this has been slow to be realized. The emerging proliferation of ‘new media’ tools and technologies in recent years, combined with innovative non-profit education orientated entrepreneurs, has facilitated dramatic transformations in the delivery of some traditional education offerings. Salman Khan, the architect of the Khan academy, along with Stavens, Sokolsky, and Thrun, the drivers behind Udacity, are leading examples of such transformations. Central to this shift in thinking is the capturing of lectures, talks and presentations in the form of a digital recordings, a concept that many traditional educational practitioners are still slow to embrace. Academics responsible for the delivery of curricula at third level will need to develop a certain "digital literacy" if they are to be positioned to take advantage of exciting new learning opportunities. This paper explores some of the issues surrounding the development of digital literacy of academic staff, particularly associated with the capturing of lectures and presentations, and places this in the context of the changing educational landscape, emerging technologies, social publishing and sharing platforms. The author reviews the emerging research in this area considering the viewpoint of several categories of stakeholders. In this way, this presentation will be of interest to the diverse community (both academic, technical and industry orientated) of practitioners that traditionally attend the EdTech Conference.

A centralised lecture capture service for Irish higher education

Brian Mulligan (IT Sligo), Peter O'Halloran (HEAnet)

Abstract
A key inhibitor in getting lecturers to create and use re-usable learning objects (RLOs) is the difficulty involved in using the systems available for recording and publishing. The need to set up recordings, post-process them, store them on the web and create links in multiple locations is either too complicated or time-consuming for most academics. Lecture Capture systems are designed to allow lecturers easily create and publish simple recordings of classes in multiple formats. They can also be
used to generate and publish other simple learning objects. In early 2012 HEAnet, in conjunction with the NDLR, temporarily hosted a pilot lecture capture system and made it available staff in all higher education institutions in Ireland. This presentation will describe the work carried out, the feedback from the participants on the system and discuss the potential and merits of a full centralised service, including the potential to generate increased activity in the creation of open educational resources (OER).

A Competency Based Approach to ICT Integration in Teaching and Learning

John Hurley (H2 Learning), Deirdre Butler (St. Patrick's College)

Abstract

In 2008, UNESCO formalized the Competency Framework for Teachers (ICT-CfT) in cooperation with Cisco, Intel, Microsoft and the International Society for Technology in Education (ISTE). This group worked together to create a common core syllabus for teachers and to provide a basic set of qualifications to allow teachers to integrate ICT into their teaching and learning, with the goal of advancing student learning. The ICT-CfT framework provides a common international standard to assist Governments in extending teacher professional development and school innovation using ICT. Using the ICT-CfT as a starting point, Microsoft has combined its own learning resources with the additional expertise of teacher content partners to develop an online teacher development platform called Educator Learning Journeys (ELJ). ELJ is a series of tools, assessments and courses available free to participating teachers. The teacher conducts a self-assessment to help identify areas where he/she needs competency development. Depending on the outcome of the self-assessment, the teacher works through recommended modules from 40 hours of online courseware at the Technology Literacy Level. On completion of the coursework, the teacher can then choose to sit the Microsoft Certified Educator exam.

Microsoft is conducting the world pilot of Educator Learning Journeys with over 1,000 teachers and student teachers in Ireland, working in partnership with St. Patrick’s College of Education, INTO, City of Dublin VEC, Meath VEC, and Marino Institute of Education. The feedback from this pilot will be used to assess and validate the programme before it is launched for teachers worldwide. This paper presents the background to the UNESCO ICT-CfT, how this links with Educator Learning Journeys, some of the early feedback from Irish teachers, and discusses the relevance of a competency based approach to ICT integration in teaching and learning.
Exploratory Case Studies at the Interface of Divergent Thinking and Online learning

Barry Lupton (Trinity College Dublin)

Abstract

This study explores how users respond to an online tool developed to enhance divergent thinking. Divergent thinking is defined as the ability to produce a large number of responses to open ended questions. It is relatively well understood cognitive process, which is viewed as an important component of creativity and a useful measure and predictor of creative ability and potential. Despite the well establish importance of creativity, it is currently under represented in education and it has been reported that education is in fact in the midst of creativity crisis. With the exponential rise in the use of online learning it is seen as vital that we gain more in-depth understanding of the complex phenomenon that mediate successful adoption and integration. While much is already known about the influencing factors which impact online learning, and those which influence the adoption of divergent thinking abilities, very little is known about human related phenomenon in online divergent thinking training: This study attempts to illuminate this interface.

To achieve this, three qualitative explorative case studies were undertaken. Multiple data sources were drawn upon to provide a rich understanding of participant experience. Data were analysed using a variety of means centring on emersion, pattern and theme identification, narrative forming, analysis and cross case analysis. Collected data related to participant experience of an online resource developed specifically to enhance divergent thinking. The resource was housed within a Moodle based VLE, which involved participants undertaking a number of well established, time constrained divergent thinking exercises over a nine-day period. The design of the learning experience was guided by Kolb’s learning cycle and involved participants undertaking structured reflective processes.

The study produced a number of significant findings, most significant of which include the influential role of undertaking placating, pre-engagement activates to facilitate mental preparedness; the importance of immediate physical environment in mediating affective states; the positive impact of divergent thinking exercises in reducing negative emotional responses to the online environment; the critical role played by the inclusion of a visible timer within the resource in both focusing and distracting participants attention and the positive benefits afforded by the facility to review answers in combination with the online reflection blogs. In addition, it was found that real world, social interaction and dialogue - which was not a designed aspect of the resource - played a vital role in enhancing the experience of users with low levels of computer and creative self-efficacy.
“Creating bespoke video for use in your classroom”

Irene McCormick (IT Carlow)

Abstract
In Ireland the use of audio-visual aids in education has been slow to emerge compared to other English speaking nations. But we are now in an age where teachers and students alike wish to live the education experience in a more technology-friendly way that mirrors the importance of digital technology in our social lives. This means a greater use, and an enhanced use, of video and other digital helpers in the classroom.

Video is notoriously difficult to produce and time consuming too. It can be resource heavy and personnel heavy. It can also be ‘removed’ culturally from the target audience, as for example in cases where video used in the classroom has been made in the US or UK and reflects that culture and context. This type of scenario can reduce a video’s usefulness to the educator. Given this, it is important that faculty try to create video that speaks to the student and is of the students’ own experience.

This paper tracks the success of one practitioner who, under the auspices of NDLR, made a series of online video tutorials on the successful production of video for education and instruction purposes. She did this in her own institution in an effort to create vignettes that were culturally appropriate for an audience of students attending an Irish third level institution, and lecturers who teach there. She will describe how she managed the multifarious demands of video production to make authentic pieces, filmed and post-produced in her college. The practitioner is an ex-producer/director with RTE and Granada Television and now media lecturer. She takes us through the process of how to plan and execute a successful video project while being mindful of the pitfalls and demands of this rewarding venture.

“I’m loving your learning innovation – but why can’t I use it?”

Simon Ahern (NUI Maynooth)

Abstract
Innovations in technology offer students increased flexibility in accessing and customising their learning, e.g. the increased use by teachers of ever-improving VLE’s through which resources and interactive activities are shared. Given the range of students in third level education, it is worth examining how the experience of technology-enhanced learning varies for a student with a disability. This study investigated if the innovative advances in learning technology are embracing of inclusive practices, whether by accident or by design.
We run a blended learning support module through Moodle that heavily promotes digital literacies. The aim of this study was to evaluate the ease with which students are accessing learning technology advances. An inclusivity audit of this module was undertaken by first applying an automated evaluation tool to the VLE and associated resources. Surveys and interviews were also conducted to evaluate the learning technology advances used in this module in terms of their accessibility and usability, with undergraduate students at NUI Maynooth who are blind or have a visual impairment, who are deaf or hard of hearing and students with specific learning difficulties, as well as the tutors who deliver the face-to-face element of this module. They evaluated the Moodle VLE itself, podcasts, PowerPoint, video, blog posts, live tutor chats and digital documents. The results showed that many previous barriers have been removed by the digital nature of the material. All students did encounter some barriers to full engagement with each of these innovations. Recommended improvements could certainly be proposed. However, the learning experience itself played a large part for students. If the learning experience was active and engaging, students had an incentive to work around accessibility barriers. As a result, it was observed that there is a significant relationship between embedding accessibility approaches into engaging technology-enhanced learning activities and the student experience.

Clinical Skills Learning Resources - An Open Access Repository

Derek O’Keeffe, Kevin Johnson (University of Limerick)

Abstract
Clinical skills' training is a fundamental part of medical education. The high academic weighting of the final year clinical exam, including the ubiquitous OSCE (Objective Structure Clinical Exams), demonstrates the importance of clinical skills in the training of clinicians. Clinical skills have traditionally been taught in clinical skills labs and at the bedside. This so-called “apprenticeship” model allows students to observe and practice a clinical skill in simulated and real settings. Currently high quality online clinical skills resources are either subscription or local intranet based. This work, with the support of a National Digital Learning Resources (NDLR) grant, has developed an online open access clinical skills portal.

In order to develop the resources, the project used the ADDIE 5(Dick & Carey, 1996) step model:
1. Analysis - Identify the project needs.
2. Design - Create a design document - consisting of a video script, storyboard, MCQ repository and learning outcomes.
3. Development - The resources were created in a Clinical Skill Laboratory.
4. Implementation - The resources were uploaded to an open access portal(Johnson & O'Keeffe, 2010).
5. Evaluation - A questionnaire was deployed to medical school students who accessed the portal.
We developed a set of high quality open access instructional learning resources and videos covering the major clinical examinations (e.g. CVS, GI) based on best practices. The delivery platform is modular and therefore, expandable, thus allowing for future resources to be added with ease.

It is important to view e-learning environments as supplementary rather than replacements for the traditional lecture-demonstration model, an opportunity for students to further refine skills and knowledge that they have been exposed to. Given the usefulness of e-learning and the paucity of material for clinical education, there is a clear need for the development of high quality peer reviewed open access online clinical skills resources.

References

Ensuring success in a fully online Computer Literacy Module
Niall Dixon (Dublin Institute of Technology)

Abstract
This presentation reports on an on-going practice-based participatory action research project whose principal aim is to examine the experience of third level students utilising a fully online Information Technology module. The module runs over a 13-week period and utilises an off-the-shelf learning system developed by Microsoft, namely the IT Academy Online Learning Program. It is clear from the student’s interactions with the learning system that in and of itself it is insufficient to foster the type of supportive, rich, student-centred environment that would encourage all students to succeed. To address this, a scaffolding approach is being employed through the use of a number of learning supports including a course website and access to an online tutor. System usage data is providing a detailed picture of student engagement. The findings so far indicate that students require a good deal of support early in relation to navigating the learning system. Having overcome this initial difficulty and with constant tutor support, students are reporting positively on the interaction with the system.
Evolving Learning Spaces for Sustainable Built Environments

Mark Kelly (Galway-Mayo Institute of Technology)

Abstract
This paper examines the use of blogs and Twitter as learning resources in the development of learning spaces for sustainable built environment modules on the B.Sc. in Construction Economics and Quantity Surveying and the M.Sc. in Environmental Systems at the Galway-Mayo Institute of Technology. The aim of this study is to investigate student engagement with the evolving learning spaces and identify key areas for improvement. Individual blogs were developed for one undergraduate and three postgraduate modules during the 2011/2012 academic year. These blog-based environments provided a platform to provide pre-lecture resources for three modules in semester 1 and post-lecture resources for two modules in semester 2. This was supplemented by two specific Twitter communities of practice to facilitate the development of personal learning networks connecting students, staff and interested industry participants. Student engagement with the learning spaces was further encouraged through blog-based assessment assignments in semester 1. The project is ongoing but our initial reflections based on informal student feedback is that the learning spaces provided an innovative teaching and learning approach. Further reflections and student feedback will be presented following receipt of the module feedback sheets and the analysis of a short questionnaire currently being disseminated to the participating students. It is envisaged that these are the first steps in the development of a collaborative learning space for sustainable building education harnessing the use of learning technologies to provide an interactive platform to allow more experiential learning during class contact time.

HMH FUSE: Algebra 1—a case study of mobile learning technology in the classroom

Iseult Coffey (HMH Publications)

Abstract
HMH FUSE is an innovative range of mobile learning products that deliver effective middle and high school mathematical learning solutions on the Apple iPad®. HMH FUSE: Algebra 1 consists of award-winning algebra direct instruction combined with a range of integrated content and features, including 400 lesson videos, guided practice, quizzes with scaffolded feedback, graphing tools, and homework help.

During the 2010-2011 school year, Houghton Mifflin Harcourt carried out a pilot program in a California middle school to test the effectiveness of HMH FUSE: Algebra 1 in the classroom. Two
classes of algebra students were randomly selected, and teachers and students were assigned iPads with the FUSE app on it. The students were given complete access to the iPads—they were allowed to bring them home and to put their own files and apps onto the devices. The behaviour and performance of students in the test classes was compared with that of students in other algebra classes over the year.

Initially, the teachers reported some frustration around integrating the new technology into their teaching. However, by the end of the pilot, they reported the app had made their job more fun and helped them to deliver effective individualized instruction to their students.

Students cited the additional support provided by the video and stepped-out help features as major positives in their learning. However, many expressed concern at the level of distraction, for example playing games during class time.

At the end of the year, results from the spring 2011 California Standards Test showed that 78% of students using HMH Fuse scored Proficient or Advanced on the state test, compared to only 59% of students in the control classes—a difference of 19% in favour of students using the HMH Fuse: Algebra 1 app.

I Didn’t Sign Up for This! Facilitating Surveying Students’ Digital Literacies

Anne Wiseman (Galway-Mayo Institute of Technology)

Abstract

The Case Study
The surveying module is a 10 ECTS credit Level 6 module with 2 hours lectures and 2 hours practicals each week. In the practical sessions students carry out surveying tasks based on theory covered in class. Assessment of these weekly practicals is traditionally based on a practical report handed in by students.

Project Aim
The focus of this project was to improve student learning in the practical sessions. The two hour weekly practical sessions were designed around an instrument called a total station which is an EDM (Electromagnetic Distance Measurement) and theodolite combined with an in-built computer to carry out calculations and store data. The data can then be downloaded to a PC to generate a drawing. Learning how to use the instrument is fundamental to subsequent surveying practicals.

Problem Definition
The main problem for the students is the short contact time with the instrument. Many forget from week to week what was done in previous sessions. My main problem is keeping the students focused during the sessions so that quality learning actually occurs and that progress can be made each week. The practical write ups do not always reflect the actual learning done by some students.
Irish Learning Technology Association

Proposed Solution
My proposal was to set a project whereby students would produce a short 3-4 minute video at the end of each practical session recapping on what was covered. My rationale was that it would force the students to collaborate and review what was learned prior to making the video. This would: (1) shift the emphasis to student centred rather than teacher centred; (2) provide a learning resource for the students to use between sessions, and (3) allow the development of student digital literacies. I stressed to the students that they would be assessed on the surveying learned and not on the quality of the video. Cameras and instruction was available and no editing was required.

Findings and Lessons Learned
The project was evaluated after the six weeks using feedback from a student questionnaire, and uncovered some unexpectedly positive and negative results which will be of interest to the EdTech conference participants.

Promoting Digital Literacy at graduate level through e portfolio development; measuring graduate competencies in a Structured PhD program Ed4Life
Siobhán O’ Sullivan, Hugh O’ Donnell, Hugh McGlynn (Cork Institute of Technology)

Abstract
The changing landscape in education and labor market policy has resulted in third level colleges being placed under increasing pressure to produce graduates with the employability skills needed for the workplace. While newly developed graduate education programs are incorporating training in these graduate competencies in courses, the challenge lies as to how these can be assessed and effectively documented. This focus on graduate attributes and employability skills is central to the development of e portfolios. Creation of an e portfolio encourages graduates and employees to consider their studies and experiences in a wider career development context. E portfolios can serve as an archive of a student’s graduate experiences, achievements, training and reflections on their learning process. Development of the e portfolio enables graduates to keep track of their learning, set their own personal development plan, and identify skill gaps through review of and reflection on their e portfolio content. With the emergence of Web 2.0 tools and the promotion of digital literacy, learners can now add extra dimension to their portfolio work e.g. through blogs acting as reflective journals, wikis in review writing and audio and video clips as evidence of presenting skills, all methods having the common goal of enhancing the reader experience and truly documenting the learners learning. This paper reviews the incorporation of e-portfolios in a new Structured PhD program, Ed4Life. We discuss the goals of the e portfolio and share our experience of engaging students in the reflective process and the taking ownership of their personal learning space which is central to the e portfolio process and development. We examine the e portfolio’s infrastructure, its
pedagogical significance and student experience of the process. We also discuss the potential use of e-portfolios in undergraduate education through a pilot study with biomedical engineers and work placement students.

Reflections on Learning and Teaching Digital Literacies

Catherine Cronin (NUI Galway)

Abstract

All education sectors face challenges with regard to digital literacy. As individual educators, our challenge is twofold: understanding and developing our own digital literacies, and structuring learning experiences and engaging with our students to develop their digital literacies. This paper describes how these challenges were addressed in a 2nd year Computer Science and IT module. The paper includes a description of the curriculum, pedagogy and assessment methods, as well as both lecturer and student reflections. Overall, four key questions are addressed. What is the goal of digital literacy education? What does a successful approach to digital literacy look like? What resources, organisations and networks can provide guidance? And how can educators support one another in our learning?

Briefly, digital literacies are those capabilities which enable us to use digital tools critically and wisely, to reflect on our use of digital tools, to collaborate and communicate in diverse networks, and to create, share and discuss our work in digital contexts, particularly open digital contexts. Implicit in these abilities are nuanced understandings of privacy, digital identity, openness and social engagement – particularly in academic and professional contexts. Engaging in exploration of these helps our students to develop effective learning practices. Pedagogy is an important consideration: practical learning and authentic contexts are critical. Digital literacies are best explored when we metaphorically and physically (inasmuch as possible) work outside the confines of the classroom and lecture hall: engaging with students as co-learners; sharing our learning and teaching philosophies; inviting ideas, discussion and reflections – from students and from wider learning communities; and acknowledging the value of informal learning and personal learning networks, which provide the key to integrated and continual learning.

Sandboxes and springboards: using e-portfolios to apply the Enterprise model of personal development planning

Imogen Bertin (University College Cork)

Abstract

Take 17 students, one University and 22 expert practitioners. Mix with liberal doses of digital expertise and opportunities for creativity. Add hard slog, imagination, teamwork, project placements,
and some reflective portfolios. Research the jobs market. Add some Google Adwords spice. Let the students teach each other some of their new skills, and reflect on what they are learning using eportfolios. Simmer for eight months with tea and coffee. Voila!

With funding from the HEA’s Springboard free fees scheme, the Department of Management and Marketing at UCC created a Certificate in Creative and Digital Marketing aimed at unemployed mature students. The students are mixed ages and abilities, with varying levels of marketing expertise, previous work experience and IT skills.

To improve the fit between the students and the work opportunities, we brought in expert practitioners to give insight into the real-world skills. With help from the students, we researched job descriptions over a six-month period. As a result, we added an option for students to take the Google Adwords exams.

In semester 1, students completed a series of “building block” tasks such as creating short videos, drafting Google Ads text, and preparing LinkedIn profiles that were evidenced using the eportfolio facility in Blackboard.

In semester 2, they carried out individual project placements to synthesize their skills in the real world. Finally, they used a Wordpress multi-site blog to curate and evidence in public their learning using Norman Jackson’s Enterprise model of Personal Development Planning (http://personaldevelopmentplanning.pbworks.com/w/page/2110913/FrontPage)

Throughout the course, the students used a facebook groups: (https://www.facebook.com/groups/UCCNewMedia/) to post resources and ask and receive advice. Other tools used included Skype tutorials and YouTube walkthroughs. Five students are now in work or internships and one has dropped out.

Technology Enhanced Basic Mathematics for Adults

Liam Boyle, Méadhbh Boyle

Abstract

This paper reports on the conversion of a mathematics module for online delivery. Everyday Numbers is a mathematics module designed to meet the needs of adult returners to higher education, aimed particularly at those who are apprehensive and lacking in confidence in the subject. Issues faced and decisions made during the conversion are explored.

The original support material for the module was in the form of a printed text. When the possibility of adding an e-learning component presented itself, it was decided to render the textbook in html and to integrate dynamic e-learning elements into the text, rather than to provide them as optional extras. The idea was that learners should encounter these elements in-line with the flow of the text.

Adult learners of mathematics require access to clear explanations of concepts and procedures, related to real life applications, and they also require opportunities for practice so as to consolidate
and reinforce their learning. The focus in the project is thus to use web technologies to provide enhanced explanations and enhanced opportunities for practice.

In this paper, issues are discussed concerning the technologies used to implement the project, including the following:

- mathml, an XML application for native rendering of mathematical expressions and formulae. The web has not traditionally been a good medium for representing mathematics, and mathml is one solution.
- JavaScript applets. Rather than produce applets in java which require a special runtime environment, JavaScript is used in this project.
- Svg is used for graphics, combined with JavaScript in cases where interactive graphics were required.
- Html5 video tag is used to embed screencasts and other video, rather than flash based video.

A preliminary evaluation of the material has been conducted and results from this evaluation are presented and discussed.

The student experience - learning through playing and creating computer games

Matt Smith (IT Blanchardstown)

Abstract

For over 30 years the potential for computer games as a motivational vehicle to support students’ learning has been pursued - for example Malone’s (1981 BYTE (6) pp258-277) magazine article entitled "What makes computer games fun?" had him asking the question "How can the same things that make computer games captivating be used to make learning with computers more interesting and enjoyable?". Open source and free for educational use 3D game development applications are now available that run on low to medium specification computers - for example many students studying computing at Blanchardstown IoT use their small ‘netbook’ computers to develop 3D games with the Unity (www.unity3d.com) game engine without any performance issues. Therefore, we argue that if the knowledge of what makes a good educational game is available, then apart from the time to develop the game, the cost of hardware and software resources is low enough to ignore. The fields of game studies, narratology and proposed fields like ‘ludology’ (for example see J. Juul's Unpublished Master's thesis ‘A Clash between Game and Narrative’, University of Copenhagen, 1999) are bringing a mature academic understanding to games in general, and to computer games in particular. BSc Computing and BA Creative Digital Media students at Blanchardstown IoT are being support in the learning of interactive 3D game development to create a range of ‘serious games’, recent examples have included fire safety training, campus room and staff location systems, language and mathematics learning. In 2012 the first cohort of BSc (Hons) Creative Digital Media
graduates have spent a semester creating individual interactive ‘virtual curriculum vitaes’, whereby they offer prospective employers and clients an interactive virtual experience (through the medium or metaphor of a computer game) to engage with and learn about the range of digital media creations from their personal portfolio of creations. We present both the background and motivation to introducing these subjects to the two categories of undergraduate student, and offer examples and informal evaluation of the products from 2012 students studying such modules.

Using Google Earth for Field trips and map making

Eve Daly (NUI Galway)

Abstract

Earth and Ocean Sciences (EOS) is a very much a field based subject where data is gathered and then processed, and interpreted, back in the office. Therefore spending time learning in the field is of vital importance in our undergraduate curriculum in NUIG. It is in the field that students gain the ability to think spatially and understand the earth as a complicated and integrated system. However with every increasing pressure on resources it is getting harder to get students out into the field.

Recent advances in computational power, development of high-speed internet access, integration of Geographic Information Systems (GIS), and explosive growth of satellite imaging and aerial photography databases have made possible an excellent product called Google Earth that can be used to aid in fieldwork based learning. At the same time Government agencies are making more data available e.g., the Geological Survey of Ireland (GSI) and the Environmental protection agency (EPA) are allowing public access various types of digital data, from geological maps, groundwater protection zones and soil types. Indeed quite a few national research bodies now stipulate that after a fixed period of time all data acquired during a project funded by them must be made available to the public, often via online delivery systems e.g., the National Environmental Research Council (NERC) in the UK.

This paper presents the application of Google Earth to create a virtual fieldtrip of a study area in Co. Galway for third year undergraduate EOS students interested in hydrogeology, geophysics and site investigation. Google Earth is also used in this course to teach students the principles of digital map making by getting them to download data from the internet and integrate it in Google Earth to produce digital maps for subsequent group reports.
What a difference a decade made: Comparing two online Teaching & Learning courses taken in 1999/01 and 2009/11, from a student perspective

Alice Louise Childs (Dublin City University)

Abstract
This paper is a comparison of two on-line Open University (OU) Teaching and Learning courses taken a decade apart, pointing up how online and distance learning changed in the period from 2001 to 2011, from a student’s point of view. Both completed courses were level 9 (NFQI), namely the OU’s Postgraduate Certificate in Teaching and Learning in Higher Education PGC(TLHE) and Education Masters in online and distance e-learning MA (ODE) (Open). When I left the world of broadcasting in 1999, to pursue a career in the Higher Education (HE) sector I was appointed near the top of the lecturing grade, teaching Media Production and as part of my contract I was required to enrol on the OU’s Diploma in Teaching and course design in higher education. The course was entirely taught online through the OU’s First Class conferencing online learning management system. There were no face to face Skype sessions in those pre broadband years. Materials arrived in boxes and asynchronous forums were frustrating and unproductive. The course was continuously assessed through hard copy portfolio and hard copy assessed essays or TMAs (Tutor-marked assignment) sent through the post. Many of the activities were centred on building the portfolio through the use of various methods from journal reflections to student questionnaire. Comparisons and digressions with e-portfolios will be an interesting aspect of the paper as one of the MA end-of-module assessments (EMAs) was in e-portfolio format; H808 The e-learning professional (2010). Other modules taken for the MA were H810 Accessible online learning: supporting disabled students (2009) and H800 Technology enhanced learning: practices and debates (2011).

Drawing on T&L pedagogy from Practice based learning and theories of scaffolding to Jenny Moon and Helen Barrett on reflection and e-portfolios, I will discuss from my personal experience the advantages which the evolved digital technology has afforded contemporary students.
Connect with your on-line Audience; Best practices for planning, managing and delivering virtual classrooms and webinars

Steve Milligan (Collaborate)

An overview of how to prepare, manage and run your own webinars, virtual classrooms or online sessions effectively.

During this presentation you will learn best practices, inside tips and ideas which will:

- Ensure maximum participation for live online sessions
- Provide insights on how to prepare your content and what are the pitfalls
- Deliver highly engaging content, interaction and participant engagement
- Achieve better results, lower cost with optimal resources.
- Allow presenters to focus on the content and NOT be distracted by the technology.

This presentation is ideal for anyone who planning to or who already use web conferencing within learning and Collaboration. These tips and ideas work with any web conferencing solution and we shall be using Adobe Connect as the solution to demonstrate some of the concepts.
Are students’ self-perceived levels of Digital Literacies reliable predictors of Academic Performance? An Irish Higher Education Research Report

Paul Gormley (NUI Galway)

Abstract

Title: Are students’ self-perceived levels of Digital Literacies reliable predictors of Academic Performance? An Irish Higher Education Research Report

Research Approach: This Research Report details the development, application and evaluation of a non-experimental fixed design (quantitative) approach to address the research question ‘are students’ self-perceived levels of digital literacies reliable predictors of academic performance?’

Problem Definition and Rationale: The rationale underlying the importance of this investigation stems from digital literacy research findings highlight that learner ICT skills often do not transfer easily to academic situations (Nicholas et al. 2008), and that tutor guidance remains a critical determinant of the technology-based learning practices adopted by learners (Goodfellow and Lea, 2009). A JISC review of higher education digital literacy approaches conducted by Beetham (2009) called for: • The development Contextualised Digital Literacy Frameworks to embed the digital literacies in higher education for both staff and students; • Providing authentic tasks and contexts for practice for this to occur • Ensuring that students’ digital and learning literacies are assessed and supported as they engage in academic tasks. However, there is very little empirical evidence that this suite of recommendations is being undertaken at present (Torkzadeh et al, 2003; Zhang and Espinoza, 1998).

Research Population: The research population sample comprised 28 adult online learners who are educators or trainers enrolled on a blended learning module titled ‘Education and Training Technologies ETT’, which is part of a NUI Galway Masters in Lifelong Learning programme and facilitated through Blackboard.

Theoretical Framework: This investigation extends Martin and Grudziecki’s (2006) DigEuLit theoretical framework to underpin the research design of this investigation as it provides a robust methodology to identify and measure contextualised course digital literacies in higher education.

Data Measurements and Analysis: To measure students’ perceptions of their digital literacies, I employed a self-administered online Blackboard student questionnaire that was presented to the...
students twice: (1) as a pre-module survey; and (3) as a post-module survey. The survey contained 55 quantitative Likert-scale statement items – plus 2 demographic questions - which the students rated to determine their own perceived Digital Literacy levels. To measure students’ academic performance, students undertook a context-specific authentic Project Assignment which was submitted during the last week of the module. I employed quantitative data analysis to identify pre and post student digital literacy differences, and benchmarked to students’ pre-course survey levels against their academic achievement (assignment score) to investigate correlations to address the research question. SPSS was used to analyse whole-group and within-group quartiles for comparative purposes.

Relevance for EdTech2012: Digital Literacies for Life: This investigation is concerned with the development of contextualised digital literacy predictor tools. Employing applied research approaches and frameworks to investigate correlations between students’ digital literacy perceived levels and their academic performance is relevant to the EdTech2012 audience from a professional technology-enhanced learning perspective (practitioner and policy) in terms of: • resource provision, prioritisation and allocation • the opportunities for differentiated and personalised eLearning delivery and • the development of evidence-based reports to support policy decisions, such as staff and student digital literacy development.

References:
"Player Transfer": Key Skills transfer in digital sports games

Gearoid O Suilleabhain, Darragh Coakley (Cork IT)

Abstract

The transfer of learning has long been a difficult issue for educational researchers. Despite the fact, for example, that our education and training systems are, in a very real sense, predicated on our ability to facilitate and support learning transfer, there is little empirical evidence to support even the occurrence of significant transfer (i.e. not merely transfer between highly similar learning and target contexts) never mind our ability to manage or control it. In the context of the recent renewed interest in the use of computer and video games for learning, the issue of learning transfer emerges again as a fundamental and fraught issue. Questions regarding the educational potential of games in general for example may ultimately be parsed as questions as to whether there is specific learning gained "in there" (or "from there") in the game world, as it were, which can be applied “out here” in the real one: in other words they transpire to be questions regarding transfer. Vendors of serious and conventional entertainment games alike also commonly make explicit or implicit claims about the ability of their products to develop generic 21st century skills; a considerable amount of political rhetoric speaks of the need to support the learning of digital natives with games and the related tools and toys of their now dominant cyberculture.

This paper offers a qualitative meta-analysis of the learning computer and video games have been shown to support and goes on to focus in on the specific and under-researched genre of sports games which seem to offer the promise of developing not just a range of sport-specific but also a range of important generic metacognitive and 21st century skills. The authors map a range of such skills and learning to a spectrum of existing commercial and serious video game titles, incorporating sub-genres such as so-called “exer-games”, sport management games, sport simulation games etc. Discussion follows with regard to an alternative view of learning transfer in which cumulative past experience and extensive background understanding can be seen to “set the stage” for new learning experiences. Concluding remarks being offered with regard to the use of computer games as research environments for further investigation into a range of learning transfer and key skills research.
Collaboration makes Economic Sense

Catherine Kane (Trinity College), Damien Raftery (IT Carlow), Paul Gormley (NUI Galway)

Abstract

Background
Recent economic pressures and staff shortages are forcing us all to examine our work practices and how we utilise limited resources to maximum effectiveness. Driven by these pressures Educational Technologists from three institutions Trinity College Dublin, IT Carlow and NUI Galway, came together to explore the possibility of developing shared online resources. The team made a successful bid for funding under the Learning Innovation Community Support Projects (LInCS) call, run by the National Digital Learning Repository (NDLR) service. In particular we were interested in looking at delivering professional academic development in eLearning by exploiting the very tools and strategies we promote.

Approach
Our research is based on the development of online resources covering the principles of eLearning Design. In particular we look at the ADDIE Model, Molenda (2003) and spin offs from this model. Currently courses are delivered face-to-face in each of the three participating Colleges, which introduce Academic staff to the principles of eLearning. This model is proving difficult to sustain, as it required triplcation of resources. In this study we examine whether we can combine our skills to develop resources suitable for online deliver and make them available to participants across all three institutions. We ask ourselves can we develop resources that are flexible, shareable and can be personalize for use in all 3 Colleges?

Results
Our study is still at an early stage. The first resource ‘What is eLearning’ has been completed and we are currently working on follow-up resources which will look at different instructional design approaches and pedagogies. Our research from this study will be twofold. On one hand we are concerned with the effectiveness of the artifact that has been developed while on the other we are interested in measuring the added value achieved from the collaborative model we used while building this artifact.

In this paper we concentrate on the value of collaboration, the sharing of skills and knowledge and the value of working as part of a larger team. When measuring value we look firstly at the personal growth of the team members, Hubert et al (2001) defines a group of people who come together to share and learn from one another as a community of practice. The building of such communities has been well promoted by the NDLR service in Ireland for many years. And indeed NDLR was the foundation from which this project sprung.

Conclusion
This paper should be of interest to all of us who struggle to provide training, development and support to the academic community in teaching and learning especially in smaller colleges and where resources are limited. Rolling this resource out in the three participating Colleges and later to other colleges outside the project will be the next stage of this study followed by continued team developments and collaborations.

References
Hubert et al. (2001) in Van Winkelen, CH, and Ramsel, Ph. (2002), Building Effective Communities, Henley Knowledge Management Forum

Digital natives are human too- what cyberpsychology can tell us about the student experience of learning with technologies

Hannah Barton, Marion Palmer (Dun Laoghaire Institute of Art, Design & Technology)

Abstract
It is the learners and teachers as human actors who ultimately determine the formative effects of engaging with technologies, but technologies can shape the potential for this to happen.’ Pachler et al (2009), Scoping a vision for formative assessment: a project report for JISC
There has been an increase in the use of technologies in education, such as social media (Facebook), games and the internet for both assessment and project work with little thought of how the user psychological interactions with the technology can affect both motivation and learning. There have been few attempts to reconcile the student as a learner and as a human user of the technologies.
This paper set out to address that issue and to focus on the learner as the “human actor “through presenting recent research from the area of cyberpsychology. The case is also made that all educators should have an awareness of cyberpsychology in order to better understand how the technology can either enhance or hinder the learning process.
Cyberpsychology is the study of the human mind and behaviour in the context of human technology interaction. It encompasses all psychological phenomena that learners experience that are impact by the use of emerging technologies such as mobile phones, games consoles, digital media and virtual reality.
This paper will highlight a number of these interactions in terms of cognition and personality and show how they can impact on the learning environment. One example that will be discussed is how online groups are susceptible to the two types of Online disinhibition effect–benign and toxic and
how these can impact the productivity of online groups. This can in extreme cases develop into cyberbullying.

The role of personality in technology usage will be discussed in light of recent research findings. Research (Amiel and Sargent 2004) has shown that personality differences exist in the use of new technologies, such as extraverts are more likely to use social networking sites to share information and ideas as opposed to substituting for real live social interactions and Wikipedia attracts individuals who score low in agreeableness and are more introverted. Furthermore, a positive relationship has been found between high levels of neuroticism and the use of social media (Wehril, 2008)

Research from cyberpsychology has also examined how the internet and technology is affecting cognitive functioning. Subrahmanyam and colleagues (2001) concluded that cognitive skills such as attention, spatial imagery, and iconic representation are improved with video game use and that those who play computer games can improve their visual intelligence. Differences in patterns of cognitive processing, between individuals who frequently and infrequently use the Internet have also been found by Johnson in 2007.

The paper will conclude with an overall summary of what cyberpsychology can teach educators in terms of the student experience of new technologies.

## Exploring studio-based learning with smartphones in an introductory programming course

**Susan Reardon, Brendan Tangney** (Trinity College Dublin)

**Abstract**

Learning to program is challenging and can be difficult for novices of all ages. A pedagogy which has been successfully adapted to computing education and one which research has indicated could potentially increase student enjoyment in problem solving and motivation in computer science is that of studio-based learning. This pedagogy places an emphasis on learning activities in which students construct personalised solutions to assigned problems and present their solutions for critical review and discussion. It employs many learning strategies including collaboration, class discussions, and peer reviews of work.

Programming for novices is usually taught in a context that does not match with the novices’ interests or experiences. A context which students increasingly associate with computing technology, is that of mobile devices. There has been a mass adoption of mobile devices by students, and significant opportunities are emerging for supporting differentiated and personalised learning experiences through mobile devices. They have become an integral part of students’ everyday lives and it is argued that their integration into coursework enables students to see the connection between computer science and real-world technology.
This paper describes how a studio-based learning pedagogy was adapted for use in the teaching of a first year Level 8 introduction to programming course. To reduce cognitive overload a phased approach was used in introducing students to programming concepts and environments. Students began by working in the visual programming environment (Scratch) before progressively moving on to a full programming language (Java) and the final development platform (an Android smartphone). This paper investigates the effectiveness of combining a studio-based learning pedagogy with the contextualised motivational aspect of application development for smartphones to help overcome the barriers novice programmers face.

An exploratory case study took place over two full academic years in the first author’s place of work with 38 first year Level 8 computing students. A comprehensive analysis of researcher observations, evaluation forms completed by students, video analysis of studio-based labs, domain expert and student interviews was conducted. Findings suggest that students were positive toward the experience and were motivated and engaged when solving contextualised problems. The findings indicate that the students were able to develop sophisticated applications and appear to have been motivated and engaged by the learning experience.

Learning Circles – A technology-enhanced peer teaching workshop
Kevin Sullivan, Claire Conneely (Bridge 21), Brendan Tangney (TCD)

Abstract
This study will explore a potential 21C method of curriculum delivery which includes; learning without a domain expert teacher, team work, peer teaching, technology and user generated content. It will examine how the students say they would like to learn, how they try to teach their peers, whether the students were engaged and motivated by this style of learning and whether or not it was an effective method of curriculum delivery. This will take place within the context of a student-led learning experience in which second level students are asked to prepare a learning experience for their peers.

Many modern students have technical skills and access to a volume of information that previous generations did not. Prensky (2001) argues that these “Digital Natives” should have some input into how they learn and suggests that they are capable of producing, as well as consuming, digital content. The concept of “Mindtools” argues that students should use technology as a tool to learn with rather than from. By using technology to create digital artefacts, students can be engaged in constructive, productive learning (Jonassen, Peck & Wilson, 1999).

Peer teaching involves students learning from each other, and by teaching, and can be, if properly structured, a powerful learning technique (Goodlad, 1990; Leung, Marsh and Craven, 2009). A powerful demonstration of what students can achieve without a specialist teacher has been given by
Sugata Mitra (2010) who conducted studies into what children, working together, but with no expert help, can learn using the internet as their primary source of information. The study is an extreme approach but the unexpected and impressive results demonstrate what can be achieved by motivated learners.
This project involved creating a student-led 21C learning experience. It explored how "Digital Native" students, working in teams, want to be taught, whether they can learn without a teacher and how they would teach their peers if given the opportunity. The roles of peer teaching, teamwork and learning without a teacher were explored within the context of an activity where students are required to create a learning experience for their peers.
Working in Bridge21 (Lawlor, Conneely & Tangney, 2010), teams of five second level students were each given a topic from the senior cycle curriculum, asked to learn it, and then prepare a learning experience, on that topic, for their peers. There were adult mentors to support the teams but none of these were experts in the topics being taught.
The study suggests that students want to learn in a constructivist, "21C learning" manner. It found that they can learn independently and use technology to teach each other in innovative ways, creating new learning experiences and digital artefacts to construct knowledge both for themselves and their classmates. Finally, this study suggests there is potential for learning without a teacher, peer teaching, technology and teamwork to play a role as part of a 21C learning solution in formal education.

Live Learning: Digital Literacy and the Practice of Inquiry
Leo Casey (National College of Ireland), Michael Hallissy (Hibernia College)

Abstract
This paper deals with the connection between digital literacy and learning as inquiry.
Drawing on a substantive research project investigating digital literacy in Irish Primary schools (DLIPS) a conceptual framework connecting digital literacy and learning is advanced. Far from regarding digital literacy as a discrete set of skills associated with either teacher or student, the model proposes a situated view—identifying literacy as associated with classroom or context rather than individuals. The following definition for digital literacy in primary school settings was developed: “Digital literacy involves pupils and teachers using digital technology to enable, sustain and enrich all aspects of the inquiry cycle of learning as: ask, investigate, create, discuss and reflect” (Casey et al 2009). The definition suggests ways in which digital media enhance the practice of inquiry. This model is underpinned by the Inquiry Cycle envisioning a spiral path of inquiry: asking questions, investigating solutions, creating and connecting, discussing discoveries and experiences, and reflecting on new-found knowledge, and asking new questions (Bruce & Bishop, 2002).
The approach is not limited to primary schools and has implications for learning in other settings. In particular, this conception of digital literacy is relevant for new and emerging practices in higher
education such as live on-line classes and tutorials enabled by synchronous computer mediated conferencing (SCMC) technology. The authors propose that in these settings the emphasis should once again be on the extent to which the situation can enable, sustain and enrich learning as the practice of inquiry.

The pedagogic task of nurturing practices such as student discussion, argument, investigation and collaboration in synchronous on-line classes is not always straightforward. New strategies will be required for online teaching and classroom management. However, this challenge is not unique to our time and we have many useful insights to draw upon when we frame our thinking in terms of the practice of inquiry. Ironically, this view of learning has more in common with the classical traditions of pedagogy as espoused by Plato, Rousseau and Dewey than the prevailing paradigm of content delivery. This is why we argue that new technology should be evaluated in terms of old ways of facilitating learning.

The authors report on how these ideas are applied in the design and delivery of live on-line instruction in college settings and the challenges faced in preparing academic staff for on-line teaching. This often involves a perceptual shift from the skills model of digital literacy to be replaced by a situated view emphasizing inquiry as the ultimate goal of instruction in this mode.

References

SLurtles: Constructionist tools for virtual worlds
Carina Girvan, Brendan Tangney, Timothy Savage (Trinity College Dublin)

Abstract
Virtual worlds provide a range of perceived educational affordances which are strongly aligned to the principles of constructionism [1], however both building and programming interfaces present a ‘high floor’ or steep learning curve that the novice needs to master before they can engage in constructionist learning. To address this problem SLurtles (low-floor, programmable Turtles in Second Life) have been designed. SLurtles follow the tradition of constructionist tools such as Turtle geometry [2], Mindstorms [3], and Lego, combining them with Scratch for Second Life (S4SL) [4]. Aligning constructionism to the perceived educational affordances of Second Life, a SLurtle-based constructionist learning experience was designed to explore the use of SLurtles in action. 12 groups used SLurtles and S4SL to build and programme interactive installations in a space provided for them.
on a dedicated island in Second Life. Each group consisted of two students on a multidisciplinary postgraduate course in technology and learning. While groups were able to meet face-to-face, they mostly worked on the installation at a distance from one another. Following completion and presentation of the installations, participants completed a short profiling questionnaire. Open interviews, written reflections, chat logs and the artefacts created by learners were qualitatively analysed using the constant comparative method.

Participants described a sense of self and presence in Second Life which supported communication and collaboration as well as the construction of the installation. Although most participants had no prior experience of Second Life or any programming experience, they described a “sense of achievement” in what they had been able to create with the SLurtles, which included an interactive piano keyboard which an avatar can play and a story narrative which responds to the actions of an avatar. They described using SLurtles as “engaging” and that the process affected their “way of thinking”. Constructionism emphasises the role of making artefacts public and this was supported by the affordances of Second Life. Participants described the public nature of the environment as driving their designs, affecting their ideas and influencing their notions of ‘sharing’. SLurtles were found to be an empowering low-floor tool to engage learners in programming through the creation of persistent and shareable artefacts.

In Mindstorms, Papert [2] advocated “the construction of educationally powerful computational environments that will provide alternatives to traditional classrooms and traditional instruction” (p. 182). Virtual worlds present such an environment and with the use of low-floor tools such as SLurtles and S4SL, they provide a powerful new computational environment for constructionist learning to take place.

References
Smartphone Technology in the Language Learning Classroom: how to make a friend out of a foe

Maria Loftus, Cathy Fowley, Olga Springer (Dublin City University)

Abstract
Mobile phones are often a source of irritation for language teachers as students are using or tempted to use their mobile phones in class. A team of language teachers in Dublin City University decided to capitalise on this and change this source of communication from an impediment to a positive learning tool by embedding it into the curriculum across several languages (French, German, Chinese, Japanese) since January 2012. Due to low retention rate of first year university students, we concentrated specifically on this particular student body in order to engage them quickly and expose them to a creative way of language learning. Whilst the boom in “smartphones” has resulted in innumerable apps that claim to greatly improve second language acquisition through fingertip knowledge, these do not allow the language student to harness his or her creative energy in a peer-led manner. In contrast, our project puts student innovation centre stage as we have trained students on how to collectively produce “pocket films” using their smartphones.

In our paper, we will firstly expose the six key aims of this initiative, three pertaining to its implementation in different language modules in first year undergraduate programmes in DCU and three related to the dissemination of this project outside the university. As pocket cinema has never been used specifically to improve language skills, we had to pioneer many aspects of the design of a pedagogical template. In the second part of our paper, we will expose how we normalised these techniques into the curriculum across languages. To date, twenty-four group pocket films have been produced and have been uploaded to a password protected YouTube channel. In the last part of our paper, we will reflect on student feedback, paying particular attention to the technological obstacles both learner and teacher had to overcome and how it fostered creativity in and outside the classroom.

The Impact of How-to Videos on Informal Learning

Bara Ayadi, Ron Elliott (National College of Ireland)

Abstract
Over the last number of years, the phenomenon of how-to videos has emerged as an efficient and effective tool for both learners and educators in a variety of educational and work environments. This paper aims to investigate the impact of how-to videos on informal learning, and how these videos are reconfiguring the way people learn. We define how-to videos as: short and concise instructional videos that deliver their objectives in a simple and stepwise manner. Cross (2007) posits that learning
takes place in both formal and informal environments and individuals learn more through informal learning. Some of the activities Cross describes, which define informal learning, include trial and error attempts, asking colleagues how to carry out tasks, or indulging in basic personal research. History is littered with failed attempts to “revolutionize” learning through innovative technology. These struggles have taught us one very important lesson: in order for technology to improve learning, it must “fit” into students’ lives … not the other way around (Clarke, 2002). This new pioneering learning model utilising how-to videos could be seen as an innovative technology that has been developed to “fit” into the lives of students and employees alike.

Our preliminary research shows that how-to videos are very effective, with almost 87% of respondents claiming to have utilised how-to videos on a regular basis. This indicates that these videos are used by students and employees alike for the purpose of learning. These initial results may indicate that how-to videos are successful because the learner can directly control the pace of their learning. The learner can also benefit from the time efficiencies enabled by the direct and step-by-step model these how-to videos utilise. However, our research also indicates that how-to videos have been less than successful in a number of areas. The reason for this lack of success is largely due to the removal of the physical interaction between the educator and the learner, which as a result, might be seen to significantly reduce the level of reliability, quality and authenticity of the learning material.

Our expectation is that this research will contribute to the existing body of academic work in the fields of learning technologies and eLearning. We also hope to arrive at a clearer understanding of the way how-to videos are impacting on, and reconfiguring, both existing informal learning and learning practices in a variety of areas. Ultimately, we also expect that our work will help us understand what makes any particular how-to video successful and the conditions necessary to maximise learning potential from such videos.

References
Cross J; (2007) Informal Learning: Rediscovering the Natural Pathways That Inspire Innovation and Performance
Clarke DJ; (2002) E-learning: Big bang or steady evolution? Learning Technologies
Uptake and Usage of Virtual Learning Environments: 
Findings from a multi institutional student usage survey
Robert Cosgrave (UCC), Angelica Risquez (UL), Claire McAvinia (NUIM), Damian Raftery (IT Carlow), Nuala Harding (Athlone IT), Eamonn Costello (DCU), Tom Farrelly (IT Tralee), Fiona O’Riordan (Griffith College Dublin), Marion Palmer (IADT)

Abstract
Virtual learning environments (VLEs) are amongst the most widely used technologies in the higher education sector, yet this area has remained largely unexplored in the Irish context. Since 2008, a multi-institutional group of educational developers have collaborated to gather students’ views on the use of VLEs. Participating institutions, on condition of anonymity, pooled their results for comparison. The survey data provided each institution with useful information on how their uptake and usage patterns compared with other institutions, in a framework which prevented abuse of the findings for marketing or public benchmarking. This project is on-going, open to participation by any Irish educational institution, and is currently integrated in the research strategy of the Irish Learning Technology Association (ILTA). A survey of students was undertaken in 2008, 2009 and 2011, using a common set of questions, and further data is being gathered in 2012. The institutions who have participated thus far represent a diversity of organizational histories and VLE systems, and results to date include the responses of nearly 20,000 students. The resulting survey data set constitutes the largest collection of information on student experience related to technology enhanced learning in Ireland to date, and is included in the upcoming EDIN publication Emerging Issues III. This presentation provides an exposition of the research methods utilised and an outline of the summary findings. In addition to providing a summary of the cross-sectional data of the current round of research, we also draw upon the previous two rounds in order to illustrate recurring and emerging themes. We focus on the implications of this for academic professional development, and we connect our results with the ways in which capacity can be built and sustained with regard to the use of new technologies in higher education. For example, some of the common misconceptions held by faculty in relation to VLEs in relation to class attendance are discussed. Finally, we aim to gather further interest from the Irish community for this project.
Practice Exchange Abstracts

Investigating the potential of Facebook as a suitable medium for establishing a community of practice for current and past students of Design at FE level

Frank Kehoe (Senior College Dun Laoghaire)

Abstract

This project aimed to investigate the potential of Facebook as a suitable tool and technique to set up a community of practice* within the design department of a Further Education college. It focused on the Garden and Landscape Design courses and concerned the introduction of a Facebook community of practice using Facebook’s group feature. The aim was not just to enhance the communication between the specialisms and year groups, which has been a problem in the past, but also the potential development of a professional community of practice to be fostered for post graduation, as numerous graduates are now either studying or working abroad. These aims were successfully achieved.

* A community of practice is a group 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, 2004)

Developing a Tailored Learning Environment

Supporting Interactive Media: A Case Study

James Draper, Adrian O’Riordan (University College Cork)

Abstract

This paper describes a case study in the design and creation of a tailored Web-based environment for language learning. A tailored approach to the organisation of digital learning materials has at least two advantages over using an off-the-shelf system or platform. It facilitates customized presentation of only content suited to particular categories of learner (e.g. beginners, children, etc.). Second, it can include interactive media such as educational games and interactive video and audio that would be either not possible or awkward, that is not fully integrated, on existing platforms. We designed and
build a learning environment by harnessing free open source tools, combined, configured and customized to match our requirements, maintain control, reduce costs and facilitate integration. The system is a Web-based community site for language learning called lingualife.com. Currently this is set up for beginners French but much of the software infrastructure can be reused for another target language or ability level. The community features include familiar features from social Websites, such as the sharing of content and seeing who is online. Also included is the ability to upload user recordings, rate user content, add tags to content and integrate with other social media websites such as Facebook and Twitter. Sample interactive multimedia content was also developed; a French language conservation simulator that uses real-time speech recognition, and interactive games and quizzes. Content was based on the Irish Junior Certificate French Syllabus which is organised around needs, expectations and interests.

This Web-based system was developed using the Drupal content management system (with a MySQL database), Flash, the Java programming language, and the Sphinx-4 speech recognition library. The system’s development time, footprint and modularity are presented using appropriate software metrics to inform decision making. We found that this tailored approach offers a viable, flexible, and near zero cost, alternative to existing VLEs.

No need to battle alone – using an integrated response to the development of online resources

Tom Farrelly, Sarah O’Toole, Tony Murphy (IT Tralee)

Abstract

At an institutional and individual level, we are increasingly being called upon to be more innovative and incorporate greater use of online resources into our delivery. While a number of early adapters have developed very useful online resources; we need to ask ourselves ‘to what extent are these resources only being produced by a proportionally small number of practitioners’? Lecturers are reporting that developing online resources took a lot longer and were far more arduous than they envisaged. The principal difficulty reported is the lack of time to learn new software packages, to find content or create content and, finally, to draw all the elements together and construct an online module or even an individual RLO. It would appear that the provision of an educational technologist alone is insufficient to encourage and support more lecturers to develop online resources and modules. This paper outlines our experiences of developing an integrated design team that works with subject lecturers to help tackle their resource and time poverty difficulties. It also provides practitioner feedback from the lecturers that were assisted in the development of these online resources. Our integrated approach targets these three difficulties by bringing together an e-education lecturer, who can guide the subject lecturer on e-learning activities; an instructional designer, who can work
with the lecturer to convert material into an interactive online format and an embedded librarian, who is adding expertise in locating ebooks, online journal articles, photographs, and podcasts. Adopting an experiential learning approach which draws on our experiences and reflections together with the feedback from our client lecturers this paper offers practical considerations toward developing a supportive, integrated structure that fosters an Institutional environment whereby the creation of online resources can become a mainstream academic activity.

Online Technologies for Work Placement Induction

Lejla Rovcanin (Dublin City University), Muireann O’Keeffe (Dublin Institute of Technology)

Abstract

The aim of a work placement module is to allow students to apply, in a protected workplace environment, knowledge and skills gained as part of an academic programme. In this environment the opportunities for alternative modes of learning - experiential, participatory, collaborative - help students to further develop the practical competencies and communication skills necessary to function as team members in a range of real working environments.

Students obtain practical experience which enhances the depth and breadth of their knowledge in the subject area. This makes the placement component an important element in ongoing student development and preparation for future careers which should thus form an integral part of all academic programmes.

This paper presents the pre-work placement activities for an NQAI Level 7 programme which were delivered as a series of workshops, seminars, practitioner talks and discussions prior to students taking up their work placement. These activities were scheduled, managed and tracked using online technologies including a Blackboard based virtual learning environment and wikis (http://pbworks.com). The paper also considers the incorporation of other approaches, such as Google Docs and Circles, Facebook and LinkedIn.

Students and employers were surveyed for feedback on the effectiveness of the proposed induction activities’ and the findings are presented here. Student perception of (a) the relevance of the induction activities and (b) the appropriateness of technologies used for the induction activities are discussed.

The paper concludes with a list of recommendations for academic programme developers and directors, as well as work placement coordinators.
Open Learning Badges as a Currency for Higher Education Qualifications

Brian Mulligan (IT Sligo), David Passmore, Rose Baker, Kyle Peck (Penn State University)

Abstract

“Open Learning Badges” is an open infrastructure being developed by Mozilla (2012) to allow training providers to award verifiable accreditation that can be displayed online and which includes evidence of achievements that can be viewed by third parties. One aim of this system is make it easier for employers to view in detail the actual skills of potential employees, particularly when the applicants have a range of smaller accredited achievements as opposed to major accredited awards. As evidence can be associated with awarded badges, it is also possible to use the infrastructure as an e-portfolio tool for accreditation of other forms of learning. Many institutions currently accept such evidence of learning towards their major accredited awards through RPL (Recognition of Prior Learning) procedures. However, such procedures are time consuming in both the verification of quality and quantification of the learning. This paper argues that if additional metadata on learning levels and quantity as well as external accrediting agencies are added to badges, these badges can act as a type of currency insofar as their value can be aggregated by third parties. The reliable automation of such a process will further accelerate the process of disaggregation of higher education as described by Wiley and Hilton (2009). Up to now the threats to higher education from learning technologies have mostly been attributed to Open Education Resources (Ossiannilsson an Creelman, 2012) and institutions have, to some extent, felt protected by their effective cartel in accreditation. An efficient reliable external accreditation system might prove to be a more serious threat. However, the integration of the Open Learning Badges infrastructure into existing higher education accreditation systems, may also allow higher education to make more use of external learning activity and thus become more efficient.

Mozilla 2012, Open Learning Badges Working Document


Promoting Technology-Enhanced Learning in an Institute of Technology Setting – a practitioner view

Anna O’Donovan, Siobhán O’Sullivan, Irene Sheridan (Cork Institute of Technology)

Abstract

While Cork Institute of Technology (CIT) has a long tradition of incorporating e-learning in the delivery of programmes, this practice had been confined to a relatively small number of enthusiastic academic and administrative staff. In 2005, CIT undertook a detailed review to investigate the underlying issues faced by academic and administrative staff that were impeding a more widespread adoption of technology enhanced learning across the institute. Supported through a number of Strategic Innovation Fund projects the various barriers both structural and procedural were addressed and the climate and context was considerably improved through a series of strategic interventions over a number of years.

A range of focused specific training opportunities were made available to encourage and enable the integration of electronic support for teaching, learning and assessment programmes. Through this institute-wide approach the impact of the work done across the institute as a whole is most evident in terms of increased usage of the LMS system, apparent through metrics such as system logins. In mid-2006, there were less than 15 lecturers actively using the LMS system, but as the first semester of the 2011/2012 academic year was under way in early September, the Blackboard system was experiencing 1,500 logins a day.

The most recent development in this area has been integration of an eportfolio system in the Ed4Life structured PhD programme to support PhD education in the Life Sciences.

This paper, through an exploration of practice explores the promotion of a climate to support the adoption of technology-enhanced learning and the integration of emerging digital tools and their enormous potential for enhanced student engagement and learning from a hands-on perspective. It demonstrates the student experience in engaging with these developments through Web 2.0 tools.

Note: Funding from the Higher Education Authority’s (HEA) Strategic Innovation Fund through the Education in Employment, REAP and Flexible Learning projects supported these developments.
Recontextualising Video Game Environments for Learning and Teaching: A Case Study in Machinima Movie Making for Collaborative, Reflective Groupwork.

Kieran Nolan (Dundalk Institute of Technology)

Abstract
This short paper is a report on a recent project undertaken by students from year 4 of the Bachelor of Science (Honours) in Computing and Games Development at Dundalk Institute of Technology, for the Designing for Cultural Diversity elective. The class were set a project to present their research on the creative reappropriation of game engines through the medium of a 10 minute machinima movie. The topics presented to choose were: (a) videogame technology in politics, (b) making money in game environments, and (c) machinima itself.
A machinima is a movie made using the environment and assets of a videogame engine (Anthropy 2012, pp.81–83). For example, the online multiplayer 3D world of popular game franchise Halo is the setting for the chat show This Spartan Life. In it the host and interviewee converse amidst intermittent gunfire from the other occupants of the Halo gamespace. The game environment also provides unique opportunities for reflective exploration and communicative expression.
By combining both theory and practice in a self-referential assessment, the project learning outcomes are reinforced for the learner, providing deeper understanding through firsthand experience (Bain 2004, pp.61–63).
Leveraging closed source media in a creative context unintended by the technologies originators allows the consumer to take control, recontextualising closed digital artifacts into fresh creative materials. Furthermore, pushing closed source computational media from read-only (or play-only) to a read-write state through creative hacking blurs the distinction between media-consumer and media-creator.
Remixing disposable digital media compliments the use of open-source in the classroom, providing a more holistic view of creative technologies beyond mainstream platform and licensing parameters.
This document intends to explore the possibilities of videogames as platforms for collaborative, presentation based work. It also opens a discussion on how closed and obsolete digital media platforms can be reconfigured for learning and teaching.

Bibliography
The Challenge of Delivering Quality Learning Experiences in Blended Learning

Sara Kyofuna (National College of Ireland)

Abstract

“Expect the unexpected. You can’t really explain it until you do it yourself, experience it yourself” – Student on Blended Learning course

Learner’s experiences i.e. the ways in which learners perceive e-learning environments, are found to be critical to motivation, creativity and learning. This paper deals with the challenge of delivering quality learning experiences in blended learning courses in higher education. Preliminary research findings from an on-going blended learning program at National College of Ireland (NCI) are presented. The researcher investigates adult learners’ perceptions and attitudes of the Certificate in First Line Management (CFLM), a HETAC level 6 course that runs for one year, and is delivered through blended learning. Specifically, the researcher asks, how do learners experience the live synchronous online classes? The study is based on observations of the live-online classes, learner interviews and thematic analysis of archived recordings. Early findings suggest that learners’ experiences are dynamic and change overtime. Data shows that during the initial stages of the course, most of the learners often experience anxiety, scepticism and excitement. This initial experience is mainly attributed to two aspects: educational - the perceived challenge of returning to formal education, and technological – attending classes in an unfamiliar online environment. However, as the course progresses learners’ initial experience soon changes to that of comfort, confidence, enjoyment and surprise at the ability to manage the studies. Further, I found that learners generally prefer the online live synchronous classes over the ‘traditional’ face-to-face classes because of the flexibility of being able attend class from wherever they are located, which suited their life styles, as well as the affordances available in the online classroom that allowed for high levels of interactivity and participation during the class. Yet, learners’ found it easier to interact during the face-to-face classes and felt the communication is richer during such classes.

Keywords
Blended Learning, Adult Learners, Learner Experiences.
The Digital Natives in Action: Young Students Teaching Older Learners

Pat Byrne (NUI Galway)

Abstract

This paper reports on the Click and Connect initiative undertaken in NUI, Galway in the first 6 months of 2012. We have committed, in collaboration with Age Action Ireland and other partners, to give basic computer training to the digitally disadvantaged, using student volunteers to train the learners. Unlike other programmes using trainers who may identify with the learners through their own experiences, the student volunteers are digital natives, having born and grown up with computer technology as an integral part of their lives. This gives them extra challenges in getting the concepts across, and it runs against the normal educational paradigm of older teachers passing their knowledge on to young learners. This paper looks at the process from the student-trainer perspective and evaluates the benefits that they gain from participating in the programme, while acknowledging the problems they might also have to overcome. Through Click and Connect they gain an awareness and value of the skills they might possess but don't currently acknowledge, they get a taste for teaching, they have what might be their first experience of volunteering work, and of course they help the learners to gain skills which are essential in today’s world. For IT students in particular, they also get to experience at close hand the confusions which often beset new users of computer technology, a very valuable insight for those whose future career might be in the design and development of software. Challenges include the need to identify with and relate to the learners while exhibiting patience and understanding with their hesitancy. The Click and Connect programme has been very successful to date and has provided us with the opportunity to develop pedagogic techniques to bridge both a digital and a generational divide.

Utilising Online Activities in Assessment of Online Distance Education Students to Enhance Collaborative Learning

Noeleen O’Keeffe, James Brunton (Dublin City University),

Abstract

Increasing the amount, and variety, of credit-bearing online activities in module assessments can aid students in engaging with those assessments and learning in collaboration with other students, in learning communities. Examples of such activities are: discussions/debate in online forums; online
experiments; and online study skills exercises. Students may then become/see themselves as active (co)constructors of knowledge. The challenge such an increase brings is that staff/students must be introduced to, and supported in, these new assessment methods. Specific documentation, with clear and persuasive guidelines for these assessments, and training, in areas such as how students can provide feedback for each other and how staff can design effective online learning activities, must be provided.
Digital Literacy: Web search ecology and some surprising conclusions about finding and promoting educational resources on the internet.

Laurence Patrick Cuffe (BAEC)

Abstract
In looking at digital literacy’s we should also consider a user’s ability to locate and promote internet based resources. In this paper I present some conclusions about the environment within which online educational resources live or die.

In the autumn of 2010 I created a number of web based resources promoting group and collaborative educational tools. To do this I used a variety of platforms, including Wiki’s based on Wiki spaces, Prezi’s on the Prezi site, Trailmeme trails and Blogs.

The range of platforms used was in part to explore the variety of online platforms available for free to educators, but also so that I could study which platform proved most effective in publicizing these resources. I sought to promote these within the educational community. After applying SEO (search engine optimization) techniques I found that despite a high placing within Google and Bing search results, relatively little traffic was being delivered to my sites.

I decided to explore this further by making a statistical examination of web traffic to these and other sites together with a series of structured interviews with a purposeful sample of educators, from a range of educational arenas.

This research was extended using publicly available information to cover over a million user visits to a range of educational websites. These included government web sites, educational blogs and educational home pages, as well as educational videos which might be used as a class material, with a view to generalizing my initial conclusions.

This led me to the conclusion that few educators find educational resources via general search. Instead the ecology of resource location is more complex and involves both online communities of practice as well as the utilization of offline resources, where trust is a significant common factor.
An awareness of these factors and sources will have a very significant impact on an educator’s ability to share and promote their work over the net.

How can learning technologies be used to overcome the pedagogic challenges inherent in teaching enterprise systems?

Ruth O’Shea (NUI Galway)

Abstract

Enterprise Resource Planning (ERP) systems are used by the majority of enterprises to run their business. These systems are used by enterprises to become more effective in order to keep up with their competitors in the marketplace. With ERP systems, their business processes are integrated with one solution rather than using different systems for different business areas. This can result in more efficient business processes with smoother data flow. These systems have become the foundation of almost every enterprise and as such, the subject of enterprise systems is regarded as being one of the core modules of third level business programmes.

Giving students the opportunity to build their own understanding of these intricate business solutions is key to preparing them for life beyond third level education, for their future careers in industry. In order to do so, educators need to be aware of the difficulties inherent in teaching this subject. Explaining how all the different business areas work with one another using these ERP technologies poses significant challenges.

The first challenge is the preconceptions students often have; of why and how enterprises use these technologies. Students tend to identify with the business areas they can relate to such as sales, or with their particular area of study. This leads to a one dimensional understanding lacking in depth. Being familiar with just some business functions means students view a business as a structure consisting of a number of independent components, rather than being one integrated system. Opening up their minds to thinking of a business as an entity rather than a collection of separate parts is a powerful lesson, one which has the potential to be achieved through creative teaching methods.

The next challenge is the complex nature of ERP technologies. Many implementation projects have suffered major failures because of knowledge gaps within the responsible project teams. Since industry professionals with extensive work experience struggle with comprehending these systems, third level students will need an especially strong learning support network. A student centred, experiential learning environment could help them grasp the connection between ERP technology and business reality.
The final challenge is the lack of research on innovative teaching models within the field of enterprise systems. Recent developments that have been made have highlighted the benefits of moving away from a directive approach and towards a student centred pedagogy of learning by doing. Overcoming all three challenges will require taking a creative look at what can be done to develop the methodologies identified so far in the literature. This paper seeks to investigate current research on emerging pedagogies being used in national and international practice. A review of this research together with preliminary recommendations of which new learning technologies may help educators meet these challenges is presented in this paper.

Learning and Teaching Digital Literacies

Catherine Cronin (NUI Galway)

Abstract

All education sectors face challenges with regard to digital literacy. As individual educators, our challenge is twofold: understanding and developing our own digital literacies, and structuring learning experiences and engaging with our students to develop their digital literacies. This paper describes how these challenges were addressed in an undergraduate IT module. The paper includes a description of the curriculum, pedagogy and assessment methods, as well as both lecturer and student reflections. Overall, four key questions are addressed. What is the goal of digital literacy education? What does a successful approach to digital literacy look like? What resources, organisations and networks can provide guidance? And how can educators support one another in our learning?

Briefly, digital literacies are those capabilities which enable us to use digital tools critically and wisely, to collaborate and communicate in diverse networks, and to create, share and discuss our work in digital contexts. Implicit in these abilities are nuanced understandings of privacy, digital identity, openness and social engagement – particularly in academic and professional contexts. Engaging in exploration of these helps our students to reflect on and develop their own digital practices in both academic and social spaces. Pedagogy is an important consideration: practical learning and authentic contexts are critical. Digital literacies are best explored when we metaphorically and physically (inasmuch as possible) work outside the confines of the classroom and lecture hall: engaging with students as co-learners; sharing our learning and teaching philosophies; inviting ideas, discussion and reflections – from students and from wider learning communities; and acknowledging the value of informal learning and personal learning networks, which provide the key to integrated and continual learning.
Measuring and Assuring Quality for Sustaining a National Service

Catherine Bruen (Trinity College Dublin)

Abstract

This research paper describes a breakdown of the key performance indicators, metrics and benchmarks required to execute and sustain an effective mainstreamed national service. It describes the rationale for the adoption of some of the performance measurements identified a National Service Roadmap (2009) and International standards. The paper then proceeds to illustrate how these measurements and the resultant outcomes have been deployed to support cross Institutional and Higher Education sector benchmarking to ensure the quality and sustainability of a national service for supporting teaching and learning.

A number of changes have been implemented to support a mainstreamed national service, from research conducted as part of a three phased internal evaluation in 2009. (McAvinia & Maguire, 2011). Since then, these enhancements have continued to be implemented and consolidated to strengthen the Service support infrastructure, usability and open access to digital learning resources and associated teaching practices as part of the roll out of a repository and community portal. A set of metrics were defined to evaluate the usage and impact of the service and its associated supports and services. These metrics are set out against five categories and include quantitative and qualitative measures.

The five categories (Sectoral Strategic Importance, Teaching and Learning, Research and Scholarship, Service to Academics and Communities and Governance, Access and Resources) have been identified from literature and national reports which describe and / or call for a national need to link and guide teaching and learning with the relevant current research outputs (Hunt, 2011; McCarthy, 2010; IrelGov, 2011). The identification of the particular categories also draws on the considerable consolidated expertise of the service community since 2005 (Bruen et al, 2011). The common impetus for all of the various stakeholders on the Irish Teaching and Learning landscape is the drive to bring a nationally coherent and coordinated approach to the development of the sector while respecting institutional autonomy (Towards a Future Higher Education Landscape, HEA, 2012). This paper describes a variety of policy instruments, performance indicators and performance measurements that were deployed in 2010 / 2011 as part of the service to ensure impact and return on investment that is underpinned by the cohesive and informed view of the community.

The quantitative measures to identify quality of the service include some of the following metrics; level of sharing and reuse, quality and quantity of learning resources, number of academics and communities using the resources; the participation rates in service activities; the number of
community events and participation rates for different subject areas; the number of interactions with the service repository and portal Services. Level of use and reuse, impact on student experience, research led teaching nexus, relevance across disciplines and research outputs.

The qualitative measures include the following metrics: the satisfaction ratings with the service from participating users; the satisfaction ratings from participants in the Communities of Practice; the evaluation of representative samples of digital resources available via the Service; and the evaluation of representative samples from individuals who have reused/integrated service resources into their teaching practice, real instances of culture change of sharing of teaching and learning resources and expertise.

Open Educational Resources for Digital Natives
Ann Marcus-Quinn, Yvonne Diggins (University of Limerick)

Abstract
In recent years there has been much discussion surrounding the notion of “digital natives” and more specifically digital natives being taught by “digital immigrants” Prensky, 2001, Selwyn, 2009, Palfrey, 2010). However, this is not really an accurate representation of the skillset held by today’s youth commonly referred to as Generation Y. This generation of students may have an eCulture but it needs to be trained. Students may feel that because they have been interacting with digital technologies all of their lives that they are more technologically literate that those teaching them. This may be further reinforced by teachers appearing to be apprehensive about using the available technologies (Lankshear and Knobel, 2006). Teachers have a duty not to perpetuate this myth. Teachers are trained and have the information literacy needed to help students exploit all that this digital world has to offer. Such training is necessary if it is the technology that is to be exploited and not the students.

Looking at the body of literature we cannot claim that just because students are young and are accessing the available technologies that they have the necessary skills to use what is available in the best possible way (Clark et al 2009, Kennedy et al, 2008). It is clear that learners are motivated to use Web 2.0 technologies and there is evidence to suggest that teachers have a leading role to play in assisting learners to make better use of these available technologies to support learning (Saloman
and Perkins, 1996). However, the current cultures of schools can prevent teachers from playing this role effectively (Callan, 1997; McGarr, 2009).

This paper describes a study where two groups of undergraduate students were provided with Open Educational Resources (OERs) which were specifically designed and developed to meet their needs. In spite of these OERs being tailor-made and curriculum specific there was a low level of use by students.

Technology-supported assessment in a Cloud Computing environment

Phelim Murnion (Galway-Mayo Institute of Technology), Markus Helfert (Dublin City University)

Abstract

Cloud computing technologies offer a number of advantages to educators and learners and several cloud computing systems, such as Google Apps and Office 365, are being extensively deployed to provide a generic virtual learning environment, in competition with (the now traditional) Moodle and Blackboard. However cloud computing technologies offer a more specific advantage to students at third level. It is now relatively easy for a small group of students to access (for example) enterprise-level Customer Relationship Management (CRM) systems such as SalesForce.com or SugarCRM. These offer obvious advantages in terms of ease of setup, anytime-anywhere access and low cost. However this study focuses on more educationally significant gains. Similar to the standard virtual learning environments (VLEs) such as Moodle and Blackboard, these systems offer a virtual environment in which the user is immersed and every user activity is recorded. Furthermore these platforms are supported by an eco-system of add-on third party tools for the administration and management of the system, primarily by accessing and manipulating the recorded activity data.

In other domains, such as e-commerce and clinical management, this combination of stored user activity data and new tools for data retrieval and analysis has led to an explosion in new analytical approaches, variously described as business intelligence or business analytics. Within educational technology, there has been a similar expansion of analytical approaches such as educational data mining and academic analytics. However, much of the research has been at the institutional level rather than the level of individual learners and educators and these approaches have not as yet been widely applied to cloud-based environments.

This study, applying an educational analytics approach to a cloud computing platform, investigates the possibilities of a new approach to technology-supported assessment in which the traditional methods of infrequent, artificial, teacher-centred tests are replaced by a process of continuous monitoring of real student activity; supported by analytics which transform the raw activity data into
a rich description of student learning. The study is based on a business computing degree group studying enterprise cloud computing using the SalesForce.com (CRM) platform. The study describes an outline approach to monitoring and assessing student learning which is both innovative from an educational viewpoint but is also capable of being replicated and scaled up to larger and more diverse environments. A design methodology is used; involving a set of assessment/analytics mechanisms which are evaluated using both pedagogic and systems effectiveness criteria. Findings indicate that student activity monitoring can produce predictions which are significant, accurate and timely and the methods and tools developed are user-friendly and adaptable.

The contribution of the work is that it provides an alternative approach to student assessment and also tools and techniques that can be re-used by other eLearning researchers in similar environments.

What impact has the LIN special purpose award on Technology Enhanced Learning made on the teaching practices of academic staff in the higher education sector?

Mark Glynn (Institute of Technology of Ireland)

Abstract

The ubiquitous nature of technology in society today has resulted in the general expectation from students of integration of technology into the classroom. Furthermore increases in class sizes combined with significant cutbacks in budgets have resulted in staff in higher education being asked to “do more with less”. Consequently as a result of both of these facts one of the areas of gaining significant interest in recent times is the area of technology enhanced learning. The aim of this paper is to assess the impact on staff of professional development training in the area of technology enhanced learning. Data collected for this paper was obtained from personal reflections from lecturers participating as students in the Learning Innovation Network (LIN) Technology Enhanced Learning special purpose award. A qualitative approach was taken and semi-structured focus group interviews were held with five academic staff, followed by one to one interviews for this case study. Results of the research revealed positive feedback from the participants, with regard to the benefits of this special purpose award with several of the participants applying their experiences as a student, to improve their own teaching. The research highlights several recommendations. Future research would be to expand the number of academic staff involved in this study and examine, in detail, the use of technology to enhance student learning.
There are numerous examples in the literature of evaluation of programmes. This study focuses on the impact of a specific professional development module for staff in the area of technology enhanced learning. This research adds to the existing research into technology enhanced learning and staff development while also investigating the benefits of LIN modules.
Developing Student Digital Literacies through Podcasting in Second Language Learning

Vincent O'Connell (NUI Galway)

Abstract

Problem Definition
Of all the four skills in language learning, the spoken skill is the one to be used first when in the country where the language is spoken. However, when preparing German students in advance of their overseas study experience the time devoted to this skill on a weekly basis is very limited. Therefore decided to investigate employing podcasting technologies to address this gap and I hoped that it would provide an extra dimension to the students' scheduled language lab and spoken skill slots.

My Digital Literacies and Rationale
I am a novice at podcasting and associated technologies. However, I had managed to produce some basic podcasts with help from my peers and felt empowered by achieving a tangible outcome. With this in mind, I wanted to extend my experiences to the German students by setting them an active learning task whereby they had to produce their own podcasts, using their own devices and share them on the NUI Galway VLE, Blackboard.

Student Outcomes
The students felt that engaging in this activity was productive when working on pronunciation and they became more confident in speaking in German as they recorded their podcasts. Furthermore they were able to develop on their pronunciation with their fellow peers. I always felt that the material covered in language lab slots need to be linked up with some form of independent learning, some form of activity that would take place outside of course tuition to make language learning a more productive experience.

Despite the minor hiccups along the way, the podcast recordings completed by the students have done two things: (1) they have helped them to overcome the inhibition to speak in a foreign language which is highly beneficial for the oral examination; and (2) the project has helped them to become more motivated in terms of learning given that it ties in with the oral and written examination.
Findings and Applications
As I reflect on the use of podcasting for this purpose, I can safely say that this added dimension, this learning technology will become a permanent fixture in the course curriculum as I design and redesign the German course I teach for the Engineering students. The experience has been met with enjoyment on the part of the participants.
I felt that this year’s German target group showed itself to be more motivated, more engaged with the curriculum when compared with previous groups who had done the same course. I am confident that students of other modules will enjoy the same experience thanks to the podcasting technology.

Digital Literacy of a Practitioner-Researcher (My living testament)
Mercy Kesiena Clement-Okooboh (University of Bolton/Veolia Energy (Dalkia))

Abstract
“Digital Literacy is knowing how technology and media affect the ways in which we go about finding things out, communicating with one another, and gaining knowledge and understanding”. Hague and Williamson (2009). Digital Literacies are those capabilities which fit an individual for living, learning and working in a digital society through finding, organising, interpreting and analysing information as well as communicating using digital technologies” (JISC, 2012).
The purpose of this study is to identify and analyse the capabilities for learning and working as an action researcher using digital tools to undertake my research, writing and critical thinking; as part of my personal and professional development; which enables me to showcase my achievements, through networking online with other practitioners. Digital literacy (Glibster, 1997) identified four key competencies assembling knowledge, evaluating information, searching and navigating in non-linear routes.

Tools
I have interacted with different technological tools in my dual role as an insider and PhD researcher; namely web 2.0 technologies, social networks: LinkedIn, Twitter and Facebook; Knowledge Management Tools: Dropbox, Mobile Phone, Google Documents, Delicious & Athens etc. This highlights the power of technologies and its influences in making knowledge available to me as a practitioner-researcher. I have also used software’s for qualitative and quantitative analysis like SPSS version 18, Excel, Word & PowerPoint, and Moodle.

Methods
The method employed is a self-study evaluation which I have used to reflect on the key significant successes and problems I have encountered in creating and maintaining networks in my role as an action researcher. It involves me thinking about and reflecting on my work, it is a form of self-reflective practice (McNiff, 2002).
Conclusion
Using the different digital tools as a means of sharing ideas, I have been able to combine my self study reflection and evaluation with those of my networks, which has identified the areas where I need to improve to increase my capabilities to fit the purpose of my living, learning and working in a digital environment.

Integrating all of these tools has helped me to improve my learning and working relationships, enhanced the interpretation and Analysing of information as well as communicating effectively using digital technologies. Overall I would say that I am a confident user of the different Digital Literacies tools.

Finally, this self-study of using various digital tools has given me a clear understanding of the purpose of these tools for my action research, knowing what to use appropriately taking into consideration ethical issues and suitability for my research. What it means to me as the insider researcher to have the knowledge and capabilities to use them to meet my living, learning and working needs collectively. The only problem I found in the process of using these tools was the pace to keep up to the vast array of tools and its changes that is so rapid.

Reference

Extending Cooperative Learning Framework to Assessing Attitudes to Student Response System in a Second Language Classroom

Alaba Olaoluwatansibe Agbatogun (University of Edinburgh)

Abstract
The use of Student Response System is (SRS) to promote active engagement in the classroom gradually cutting across many school subjects. The use of SRS in Nigeria is at the prime stage; hence
the existence of dearth of academic investigations about users’ attitudes towards the use of SRS technology in education sector. Exploring cooperative learning framework, this study examined the perspectives of both the teacher and the pupils about the use of SRS in a classroom where English was taught as a second language (ESL). The views of the teacher and 41 pupils were collected through semi-structured interviews, audio and video recordings, as well as the administration of questionnaire. Quantitative data were descriptively analysed with the use of Boxplot and Column charts. The overall attitude of the pupils to the use of SRS in ESL classroom was positive. Both the teacher and pupils perceived SRS as a tool that supports learners’ active engagement, provides immediate assessment and feedback opportunity to learners, increases learners’ attention and improves learning gains in the classroom. All participants desired continued and future use of the SRS technology in English language class as well as the extension of SRS’s use to other school subjects.

Facilitating inclusion in assessment: Inclusive Media and Communication for Disability Studies

Imogen Bertin (University College Cork)

Abstract

UCC offers a part-time Higher Diploma in Disability Studies aimed at supporting participation of people with disabilities in education, training, work and leisure. There is a 5-credit module on inclusive media and communication that seeks to introduce basic concepts of inclusive design in communication, and to improve students’ skills in areas like social media and Internet research. The focus is on providing awareness of recent developments in IT-mediated assistive technologies (such as mobile phone banknote recognition for the visually impaired) from the viewpoint of the person, rather than the technology.

The course intake is mature students of mixed age, previous work experience and IT skills. In 2011, there were two visually impaired students.

Students learn how web pages can be made accessible for people with a range of abilities, and are introduced to the various models of design used in creating accessible user experiences. They consider both the benefits and the drawbacks of online communication for people with disabilities and get hands-on demonstrations of tools like smartphone screen readers.

Practical skills taught include improving access to online information (eg ability to vary font size and colour, and to carry out efficient research on search engines), as well as help with keeping up to date on new developments using LinkedIn and message forums. Creation of video and facebook content is encouraged and there is a practical session on creating digital community music.

Assessment is through an MCQ open book exam that includes a case study element. Students read the case study just before the exam, and answer MCQ questions based on the information gleaned.
The second part of the exam involves completing a crossword where students can use an Internet browser to search for information to solve the clues.

Getting students to generate content for your classes

Mark Glynn (Institutes of Technology, Ireland)

Abstract
Educationalists have long been arguing the need for a radical overhaul of teaching in higher education, one that shifts the focus away from the presentation of content and toward more active learning styles that better prepare students for the knowledge era. By participating in the learning process the students have increased their appreciation for the subject and also provided a wealth of resources for future classes. This short presentation outlines two distinct methods that I have used to get students to create content and actively participate in their learning.

Identification of individual learning style electronically could facilitate improved lifelong learning, an internationally recognised transferable skill.

Martina McGuinness, David Ryan (IT Carlow)

Abstract
Students can have very different learning styles and these styles can be assessed using a number of methodologies. The VARK questionnaire, which is available online, uses 16 questions to determine whether the student has a primarily visual (V), aural (A), Read-Write (R) or Kinaesthetic (K) learning style, or has multiple learning styles. Learning styles of undergraduate students in the Department of Science and Health (DSH) at ITCarlow were determined using the VARK questionnaire. A number of DSH biology stream undergraduate students ranging from 1st year to 4th year were studied. Analysis of students’ learning styles showed that as students progressed from 1st yr to 4th year they matured from using primarily one learning style to using multiple learning styles reflecting their exposure to a wide variety of teaching strategies at third level. Students found identification of their learning style(s) to be informative and empowering.

Recently, a new 1st year module called ‘Effective Communication and Teamwork,’ which focuses on teaching the six internationally recognised transferable skills sought by employers, was designed and delivered to all 1st year Science students (approximately 200) at ITCarlow in the first semester. Students taking this module are required to use the VARK questionnaire electronically to identify their individual learning style(s) and to write a reflective commentary on their findings. Being aware
of their individual learning style(s) and working with the relevant study tips given on the VARK website could facilitate improved lifelong learning, one of the six internationally recognised transferable skills.

First year students could retake the VARK questionnaire in 2nd, 3rd and/or 4th year and determine whether or not their own individual learning style is changing/ developing as they complete their undergraduate education, and include their observations in an undergraduate reflective diary or e-portfolio.

MEDEA Awards 2012
Philip Pious Penny (IADT)

Abstract
This proposed Electronic Poster will inform attendees at EdTech2012 about the MEDEA Awards Project: http://www.medea-awards.com

The aim of the MEDEA Awards is to encourage innovation and good practice in the use of media (audio, video, graphics and animation) in education. The awards also recognise and promote excellence in the production and pedagogical design of media-rich learning resources.

In recent years there has been remarkable interest in the creation and use of digital video and audio in education, boosted by the increasing impact of multimedia and video based websites and applications on the internet and mobile devices. The pedagogical vision is clear: it is only when video and audio are routine components of education and online learning, that we will have an educational environment that reflects the media-rich world in which our learners now live.

History of the MEDEA Awards
The MEDEA Awards were launched in November 2007 and have been an immediate success with submissions sent in from across Europe and beyond. Over the years, several new awards have been introduced, recognising and rewarding different aspects of the field of media in education and its importance in a European context. Since 2010 the MEDEA Awards are also integrated in the Media & Learning Conference, a yearly conference (held at the Flemish Ministry of Education in Brussels) bringing together practitioners and policy makers, highlighting the latest developments, services and digital and media competences in education and training.

Presentation Setup
A mini Pico projector attached to a Laptop or iPad will be used to show interested attendees the MEDEA Awards project website and related resources.
Online Education in the UCC Law Faculty

Patrick Rice (University College Cork)

Abstract
This paper will outline the Law Faculty's generation of online content in its modules. It will address how we do create, produce and deliver content to students electronically. I will also reference the experiences that we have had with delivery of content from a technical point of view. Online learning was first introduced in our E Law Summer Institute (run jointly with University of New Hampshire School of Law) in 2006. This paper will also aim to show where we are going with e-learning in the Law Faculty.

Staff development opportunities in bite size chunks

Mark Glynn (Institutes of Technology, Ireland), Niamh Rushe (LIN)

Abstract
The LIN project started in 2007 as a collaboration project between all of the institutes. It was originally funded by SIF. At the end of that stage of the project a number of level nine special purpose awards had been written, validated and piloted within a number of institutes. Following a positive review in the HEA commissioned SIF review in 2010 the project continued through IOTI and since then the Postgraduate Diploma in Learning, Teaching and Assessment has been validated through AIT. This poster will highlight the various progression pathways available to staff through the LIN special purpose awards.

Turnitin and Moodle Integration - One year on

Brian Coll (IT Sligo)

Abstract
In 2011, IT Sligo integrated Moodle with Turnitin. While the integration has been successful with staff uptake increasing ten-fold, it has also had a profound impact on other areas within the institute such as:

- Plagiarism policy and procedures
- Staff training
- Academic Integrity
- Electronic submission of assessments
This presentation will review the implementation of Turnitin one year on. It will discuss the lessons learnt and the implications for other colleges in moving towards eAssessment. While new tools such as Turnitin are very powerful, they sometimes can have wider implications beyond the immediate use of the tool.

Using a wiki for learning and assessment on a Level 9 blended learning module in research methodology – an update

Aidan O'Dwyer (Dublin Institute of Technology)

Abstract

This contribution will give an updated evaluation of the use of a wiki for learning and assessment, on a 5-ECTS module in Research Methodologies and E-Learning, delivered on a blended learning basis to students enrolled on an M.Sc. programme in Energy Management at the author’s college. The module, whose outcome is the development of an individual research project proposal by students, subsequently leads to a 25-ECTS supervised research project. The module is delivered through three face-to-face workshops and the use of a collaborative website (wiki).

The wiki is used as the main co-ordination tool for the delivery of the module, as a repository for course materials and links to learning resources, as a tool to record individual progress in developing a research proposal, and as a collaborative learning environment by the student cohort. The wiki content is also used as part of the module assessment, with 10% of the module credit allocated to the quality of contributions in personal wiki pages developed, and a further 10% allocated to quality of individual contribution to the wiki pages of peers.

A previous contribution by the author examined the module delivery method with one student cohort in Semester 2 of the 2008-9 academic year (n=24), suggesting that the wiki facilitated learner-centered education, motivates independent learning, is compatible with the student profile and background, and through peer learning unlocks previous work and learning experiences to the benefit of all learners.

The module delivery method has now been used with seven cohorts of students over the same number of semesters (n=172). Student and tutor experiences with the blended learning approach will be detailed in the contribution.
What's new in Moodle 2?

Mark Glynn (Institutes of Technology, Ireland)

Abstract
The VLE is integral to most higher educations with HE in Ireland no exception. More than half of the higher education institutions in Ireland use the open source product Moodle as their main Learning Management System (LMS) with the remainder using a commercial counterpart Blackboard. As Blackboard has evolved to Blackboard 9, Moodle has moved to Moodle 2. This evolution to Moodle 2 brings numerous changes for the lecturer and student and this short session will highlight the key changes for the lecturer leading with the pedagogical benefits and not the technology niceties.
Technology in Action

Since EdTech2010, ILTA has introduced a 'Technology in Action' presentation strand highlight successful synergies between education and eLearning partners.

We want to showcase how partners have identified pedagogical and technical needs, which have been addressed collaboratively with eLearning solution providers to enhance the teaching and learning experience. All case studies have been road-tested by user-groups and include the following elements:

- Pedagogical/Teaching and Learning need
- Technological Solution
- Update on progress - how things have been going
- Demonstration of the technology
- Lessons Learned/Next steps

The following 5 invited case studies cover a diversity of education and eLearning contexts.

1. Blackboard Collaborate and DCU
2. DIT and Echo360
3. Collab8
4. NUIM and Enovation
5. An Foras Feasa

2013 Invitation
We invite colleagues/institutes and eLearning providers to develop Technology in Action case studies which ILTA will promote and showcase on the ‘Industry/eLearning Collaboration’ section of the ILTA web site. A selection of these case studies will be invited to present at EdTech2013.

For more information please email info@ilta.ie
Workshops @ EdTech2012

Based on participant feedback from previous EdTech conferences and ILTA Group LinkedIn discussions, we are delighted to offer EdTech2012 delegates the opportunity to avail of the following user-and vendor-facilitated free workshop sessions.

All workshops are scheduled for Friday afternoon, June 1 2012, and run for 50 minutes.

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Facilitators</th>
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<tbody>
<tr>
<td>2:15 – 3:05</td>
<td>iBooks Author Introduction to Adobe Connect and OnSync Meeting Rooms</td>
<td>Facilitated by: Pauline Foley (Collab8)</td>
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<tr>
<td></td>
<td>iBooks Author Assessment and Feedback using Blackboard Learn</td>
<td>Facilitated by: Keith Young (Typetec) and Éanna Ó Brádaigh (Apple)</td>
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<td>Producing Screencasts: Software Alternatives and Practical Uses</td>
<td>Facilitated by: Mark Glynn (IOTI) and Damien Raferty (IT Carlow)</td>
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<td>Moodle 2 Workshop: A hands-on exploration of the new features in Moodle 2</td>
<td>Facilitated by: Stephen Clark (Blackboard Learn) and Muireann O'Keefe (DIT)</td>
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<td>ePortfolios: User Comparisons and Applications</td>
<td>Facilitated by: Muireann O’Keefe (DIT)</td>
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Workshop Descriptions

iBooks Author

Keith Young (Typetec) and Éanna Ó Brádaigh (Apple)

Description
Anyone can create stunning iBooks textbooks, cookbooks, history books, picture books, and more for iPad. All you need is an idea and a Mac. Start with one of the Apple-designed templates that feature a wide variety of page layouts. Add your own text and images with drag-and-drop ease. Use Multi-Touch widgets to include interactive photo galleries, movies, Keynote presentations, 3D objects, and more. Preview your book on your iPad at any time.
Come along and check out how easy it is to create your own iBooks with us.

Delivering Desktop, Mobile and On-Demand Teaching and Learning Through Adobe Connect Pro 8 plus and introduction to OnSynch meeting rooms

Pauline Foley (Collab8)

Description
Collaborate (Collab8) shall be demonstrating how you can achieve powerful teaching and learning through the rich interface of Adobe Connect web conferencing.
During this workshop you will have an opportunity to experience the following:
• Rich, flexible and customizable user interface to support any style of learning
• Use of Multi-media, interactive flash and many other content formats
• Reaching beyond the desk top with Adobe Connect Mobile learning
• Event Management for larger audiences
• Integrations and applications for Adobe Connect which extend the possibilities of web conferencing
This workshop is ideal for any delegate who is considering or who is already using web conferencing as a teaching and learning tool, as we will demonstrate why Adobe Connect is the number one web conferencing solution as agreed by industry analysts.
Producing Screencasts: Software Alternatives and Practical Uses  
Mark Glynn (IOTI) and Damien Raferty (IT Carlow)

**Description**

A screencast is a digital movie in which the setting is partly or wholly a computer screen, and in which audio narration describes the on-screen action. The term screencast compares with the related term screenshot; whereas screenshot is a picture of a computer screen, a screencast is essentially a movie of the changes over time that a user sees on a computer screen, enhanced with audio narration.

This workshop will give an overview of some of the tools that are available to create a screencast, highlighting the “do's and don'ts” when making screencasts. The session will also illustrate the wide range of practical uses of screencasts in higher education.

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ePortfolios: User Comparisons and Applications  
Muireann O’Keefe (DIT)

**Description**

The use of ePortfolios in higher education is a hot topic. But where to start? Join us for user reviews of common ePortfolio tools such as Mahara and Diary Pro, and swap ideas and real-world applications with your colleagues in the field. Bring your own issues, problems and solutions for a lively session.

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Assessment and Feedback Using Blackboard Learn  
Stephen Clark (Blackboard Learn)

**Description**

This workshop session will briefly review how and why we assess learners and will then look at the following:

- Assessment Tools
- Assessing Activities
- Recording Marks
- Assessment Criteria
- Curricular Mapping
Moodle 2 Workshop: A hands-on exploration of the new features in Moodle 2

Gavin Henrick (Learning Technology Services (www.its.ie))

Description
In this workshop, you will be taken through a list of common tasks through which the new features of Moodle 2 will be explored.
To fully participate a Laptop or notebook is recommended, however we will be encouraging people to sit around each others’ screens to see how the process works.
You will be provided a test login to a Moodle 2 site to which you will keep access for 1 month after the conference.
Map for Delegates attending EdTech 2012, NUI Maynooth

Main entrance by car to North Campus from Kilcock Road

NB One-way system in operation: turn left on entering, and follow road around campus until you see signpost for Car Park 9.

- Iontas Building
- Hume Building
- Long-term parking: Car Park 9 no permit or payment required
- Pedestrian entrance: crossing at Manor Mills car park