



**The 2<sup>nd</sup> eSTEEeM Annual Conference  
STEM Futures – Innovations and Impact**

**26<sup>th</sup> March 2013**

**FINAL PROGRAMME**

Time	Session	Venue
8:45 – 9:30	<b>Registration and Coffee</b>	<b>Bay Reception/ Medlar and Juniper</b>
9:30 – 9:40	<b>Welcome Address and Introduction</b>  Professor Anne De Roeck, Dean and Director of Studies, Faculty of Mathematics, Computing and Technology	<b>Hub Lecture Theatre</b>
9:40 – 10:00	<b>Addressing the Challenges</b>  Steve Swithenby and Keith Williams, eSTEEeM Co-Directors	<b>Hub Lecture Theatre</b>
10:00 – 10:30	<b>Opening Keynote Presentation</b>  Phil Butcher, Project Manager, LTS and Sally Jordan, Staff Tutor and Deputy Associate Dean, Assessment, Faculty of Science  <b>eAssessment: innovation and impact</b>  The use of interactive computer-marked assignments and quizzes on Open University STEM modules increases every year and 65 modules in the faculties of MCT and Science now use iCMAs. Innovative question types such as STACK (using computer algebra) and Pattern Match (enabling the automatic marking of short-answer free text questions) have been incorporated into Moodle. But how much are these innovative question types used? How much do we know about student engagement with eAssessment? This presentation will discuss these topics, challenge some assumptions and celebrate some successes. We conclude that changes in the detail of what we do can have a major impact on student perception and engagement.	<b>Hub Lecture Theatre</b>
10:30 – 10:45	<b>Coffee-to-go</b>	<b>Medlar and Juniper</b>

10:45 – 11:50		Parallel Sessions - Short Oral Presentations		
<b>Parallel Session A</b>  <b>Chair: Kevin McConway</b>	Paul Piwek and Jonathan Woodthorpe	Argumentation Education for Computing and Technology Students (5)	In the ArguEd project, we have been investigating how to integrate the teaching of argumentation skills with Computing and Technology course content. We report on our experiences, in particular, with the use of graphical drag-and-drop interactive computer-marked quizzes to scaffold the students' argument analysis skills.	<b>CMR 1</b>
	Martyn Cooper	Learning Analytics and disabled student support/accessibility – exploring the potential (7)	Learning analytics can be defined as the use of data about learners and their contexts, for the purposes of understanding and optimising learning. This presentation explores the potential of learning analytics to particularly support disabled students in STEM subjects and to identify accessibility deficits in learning activities delivered online.	
	Jon Rosewell	Can Computer-marked final assessment improve retention? (9)	Interactive quizzes are often attempted by more students than will turn up to an exam or submit an end of module assignment. Can we improve retention by including a computer-marked exam in end-of-module assessment?	
	Rita Tingle	Exploring student attitudes to formative quizzes (13)	A presentation of the results of two small studies investigating the factors that motivate students to engage with formative quizzes and the barriers they perceive in using these quizzes as part of their study.	
<b>Parallel Session B</b>  <b>Chair: Laura Hills</b>	Kay Bromley	Assessing the transfer of academic learning into workplace achievement (1)	Portfolios of students on a Postgraduate certificate module have been examined using a three step approach based on grounded theory. This presentation describes how benefits to the student and the employer can be assessed and discusses the types of evidence presented by students to support their reflective commentary.	<b>CMR 11</b>
	Soraya Kouadri Mostéfaoui and Judith Williams	Towards a Generic Model for Assessing Alternative Media (15)	Our project investigates the feasibility of using the T215 assessment model across a range of 'alternative media' elements and tasks in different contexts. In this presentation we will discuss the results of our investigations including, students' and tutors surveys, module team interviews and a focus group.	
	Mark Jones and Anne-Marie Gallen	Developing practice in online rooms by peer observation, feedback and reflection (19)	We report on a pilot scheme in which tutorial staff for Physical Science modules were encouraged to develop their practice in the use of online rooms by a process of peer observation, feedback and reflection.	

<b>12:00 – 12:50</b>	<b>Online Practical STEM Strand – Plenary Session</b>			<b>Hub Lecture Theatre</b>
	A look at current and future practice.			
<b>12:50 – 13:30</b>	<b>Lunch</b>			<b>Medlar and Juniper</b>
<b>13:30 – 14:15</b>	<b>Poster Presentations and Demonstrations</b>			<b>Hub Lecture Theatre</b>
<b>14:15 – 15:00</b>	<b>Parallel Sessions – Demonstrations and Structured Briefings</b>			
<b>Parallel Session C</b>	Michel Wermelinger	Interactive Scatterplots and Bubble Charts (3)	This demo session will show how to create and use interactive scatterplots and bubble charts for data exploration, using the iChart tool. The session will have two parts, the first covering the student perspective, the second the module team and tutor perspective.	<b>CMR 15</b>
<b>Parallel Session D</b>	Elaine Thomas, Steve Walker and Sarah Davies	Hybrid Digital/Material/Networked Learning - scruffy mongrel or sleek new breed? Practices and implications of blending physical and digital resources for learning in HE (12)	Technological change in areas such as ubiquitous computing and the internet of things blurs the boundaries between the digital and material worlds in ways which could radically enhance education. Our project investigates 'hybrid' digital/material/networked combinations for science and technology learning. Is this hybrid a sleek new breed or learning, or a scruffy mongrel of mixed parentage?	<b>CMR 11</b>
<b>15:00 – 15:15</b>	<b>Afternoon tea-to-go</b>			<b>CMRs 11 and 15</b>
<b>15:15 – 15:45</b>	<b>Parallel Sessions – Short Oral Presentations</b>			
<b>Parallel Session E</b>  <b>Chair: Daphne Chang</b>	Helen Donelan	Enhancing professional networking and engagement using social media (6)	This session will present initial findings from a project exploring how social media is currently being used by STEM academics to engage with existing professional networks and broader communities. Activities, motivations and outcomes associated with the use of social media for maintaining professional identities online will be explored.	<b>CMR 1</b>
	Karen Kear, Frances Chetwynd and Helen Jefferis	Personal profiles in VLE forums: do students use them? (11)	Personal profiles in online learning environments should help to build a sense of community. But profiles in OU VLE forums are not widely used by students. This talk explores why this might be, based on research with Level 1 Computing and IT students, and findings from the literature.	

<b>Parallel Session F</b>  <b>Chair: Carlton Wood</b>	David Robinson and Manfusa Shams	Researcher-lead on-line science modules – towards a pilot module (14)	A researcher-led module at third level has been devised as a pilot for presenting advanced science. The potential for modules in other areas is also being examined and the results of this investigation will be outlined, with the aim of encouraging future third module teams to incorporate this type of practical module.	<b>CMR 11</b>
	Peter Taylor and Sam Smidt	Working with Central Asian Universities to develop e-learning platforms and pedagogy (18)	CANDI is an EU project involving partners from Central Asia and Europe. The project's aims are around building HE capacity in Central Asia and developing e-learning. The OU has been helping establish platforms for sharing materials between partner universities but also working to ensure that the distance courses produced are credible distance learning.	
<b>16:00 – 16:45</b>	<b>Closing Keynote Presentation – a perspective on how another major mature national distance education provider is positioning itself in respect to its traditional and new constituencies.</b>  Daniel Torres Mancera, Director General, Higher CSEV (The Centre for Higher Virtual Education) and Timothy Read, Director, Open UNED (The National University of Distance Education)  <b>Redefining Higher Education: The Case of CSEV – UNED</b>  After centuries of steady yet calm evolution, the last two years have established new foundations in the world of University and Academia. Concepts such as 'classroom', 'student', 'faculty' and, overall, 'learning', are showing a strength and will of their own to change and surprise us again and again, in a matter of months or even weeks. Collaborative, massive learning, learning analytics, content and community curating, are all terms already inserted into our everyday vocabulary. And they come with their own set of new questions: What's the new pedagogical trend? Are new paradigms ground-breaking innovations or just new fads? What's the key to the financial sustainability of MOOCs? Where will value in higher education and life-long learning be found in five years time? Will universities as we know them still be here in ten years time?  CSEV Foundation and its parent University, UNED, are working on real projects, implementing real innovation and working with the most advanced partners on a global basis to help find answers to all these questions. In this session we will open a dialogue about everything we are discovering and learning in the process.			<b>Hub Lecture Theatre</b>
<b>16:45</b>	<b>Close</b>			