

### Monday 18th June 2018

### All sessions held in Meeting Room 1, Jennie Lee Building

Tollady I	0 )4110 = 010	sions nota in Processing Room 1, Johnson 200 Bananing	
09.45-10.00	Welcome to CALRG 2018, by Professor Eileen Scanlon		
10.00-11.00	Keynote 1 – Dr Andrew Manches, University of Edinburgh: Embodiment and Learning: implications for the design of novel learning technologies.		
11.00-12.00	Session theme: Aspects of pedagogy I (Full papers)		
	Simon Rae	Digital Pedagogy: Past, Present & Future.	
	Denise Whitelock, Alexandra Okada, Wayne Holmes and Chris Edward	Trust in Time? Teacher and Staff views after piloting an eauthentication system.	
	Julia Sargent and Ashley Casey	Digital technology and pedagogy in Physical Education teaching: Flipped learning as a strategy to optimise physical activity time.	
12.10-12.45	Lightning talks		
	Barbara Conde Gafaro	Repurposing MOOCs for Academic Language Learning: An Exploration of Self-regulated Learning Strategies in Higher Education Language Courses using MOOCs.	
	Christine Gardner, Allan Jones and David Chapman	Analytics for tracking student engagement.	
	Tim Coughlan and Kate Lister	Using journey representations to reflect and understand the student experience.	
	Katy Jordan	Tracing the boundaries of personal and professional academic identities through social media platforms, perceived audiences, and research impact.	
	Francisco Iniesto	YourMOOC4ALL research project: MOOCs for inclusive design.	
	Chrysoula Mangafa	Children and Families in the Digital Age: Playing Together with Mobile Devices to Build Social Skills in Children with Autism.	
	Robert Farrow, Beck Pitt and Bea de Los Arcos	BizMOOC: massively open online courses for business development and excellence.	
12.45-13.30	Lunch and posters		
13.30-14.30	Keynote 2 – Dr Manolis Mavrikis, UCL Knowledge Lab: Augmenting teachers' intelligence: a new role for Artificial Intelligence and Learning Analytics.		
14.30-15.10	Session theme: Access to learning: (Full papers)		
	Jessica Carr	How do people with learning disabilities understand citizen inquiry, and where do we go now?	
	Koula Charitonos, Stamatina Anastopoulou, Agnes Kukulska-Hulme and Carolina Albuerne	Evaluating the Frontline Immigration Advice Project	
15.10-15.30	Coffee and posters		
15.30-16.10	Session theme: Trickiness, openness, and uncertainty (Full papers)		
	Lesley Boyd	Using learning networks and Tricky Topics to drive module improvements in the OU.	
	Victoria Murphy, Vasudha Chaudhari, Allison Littlejohn and Bart Rienties	A comparative perspective of approaches to uncertainty: Finance vs energy sector.	

09.30-09.45	Welcome to day 2, by Professor Eileen Scanlon		
09.45-10.45	Keynote 3 – Professor Jane Seale, The Open University, with special guests Ajay Choksi, David Banes and Julie Harris:  Examining the design challenges of the 21 <sup>st</sup> Century through the eyes of disabled people: Openness, Assistance and Participation		
10.45-11.00	Coffee		
11.00-12.00	Session theme: Aspects of pedagogy II (Full papers)		
	Jon Rosewell and Open Networking Lab Team	Open Networking Lab: online practical learning of computer networking.	
	Pinsuda Srisontisuk	Teachers designing for collaboration among young children using mobile touch screen technology.	
	Fernando Rosell-Aguilar	Automated and peer feedback within a language learning app: how much do learners need?	
12.00-12.30	Lightning talks		
	Nashwa Ismail and Anne Adams	Games-Based Sex Education in Thailand: An Integration of an Online Games-Based Learning Approach to Help Secondary School Students in Thailand in Their Learning about Sex Education.	
	Gosia Iwaniec-Thompson	Older academics' learning: participation in practice and learning biography.	
	Khadija Mohamud	Investigating the Impact of Hello Hubs a locally-focused Educational Technology Initiative in Uganda	
	Christine Gardner and Soraya Kouadri	Supporting Degree Apprenticeship students: Tutors' and Students' perspectives	
	Trevor Collins <i>et al.</i>	Exploring inclusive labwork and fieldwork in the OpenSTEM Labs	
12.30-13.30	Lunch and posters		
13.30-15.10	Session theme: Learning analytics (Full papers)		
	Jekaterina Rogaten and Bart Rienties	An analysis of the learning gains of first year STEM students.	
	Bart Rienties, Thomas Ullmann and Simon Cross	Critical discussion of Student Evaluation scores, written expressions and academic performance at the OU.	
	Saman Zehra Rizvi, Bart Rienties and Jekaterina Rogaten	Intertemporal Modelling of Learning Trajectories; a Validation Study of Four MOOCs.	
	Quan Nguyen, Bart Rienties and Sam Thorne	The effect of study breaks and exam revision weeks on student engagement and pass rates in Computer-Based Assessment setting.	
	Thomas Daniel Ullmann, Stephanie Lay, Tim Coughlan, Kate Lister, Simon Cross, Bart Rienties and Denise Whitelock	Understanding SEaM student comments from a Big(ger) Data perspective: what are students saying?	
15.10-15.30	Coffee and posters		
15.30-16.30	Session theme: Questioning pedagogical assumptions (Full papers)		
15.30-16.30		Comparing comparators: how should the quality of education	
15.30-16.30	Andrew Brasher, Wayne Holmes and Denise Whitelock	offered by online institutions be assessed?	
15.30-16.30	The state of the s		

#### **Keynotes**

## Mon 18<sup>th</sup> June 2018 10.00-11.00hrs



# **Dr Andrew Manches, University of Edinburgh** *Embodiment and Learning: implications for the design of novel learning technologies*

There is general agreement that 'hands-on learning' is something to be encouraged. But why? Is it simply more fun and sociable, or are there any more direct cognitive benefits? This talk will draw upon work from several funded projects (ESRC/NSF/Carnegie/Wellcome) that have evaluated claims that cognition is grounded in body-based interaction. The shared approach of this work has been to examine the gestures that children, and adults, generate when communicating their thinking. These embodiment claims have many implications for education, from the types of activities we provide to the design of learning technologies. The talk will share video from across the projects and include reflections on the challenges of bridging learning sciences research and the commercial development of learning technologies.

#### **Biography**

Andrew Manches is depute director of Research and Knowledge Exchange, and senior lecturer in the Learning Sciences at the University of Edinburgh, where he directs the Children and Technology group in the Digital Education Research Centre. Previously an Infant teacher, he is a design-based researcher focusing on the role of physical interaction in learning and the implications for emerging technologies. His work has been supported by various funders including a recently completed ESRC Future Research Leader grant, and he has recently begun his role as PI of the UK on a UK/US Science Learning+ project funded by the Wellcome/ESRC/NSF examining embodied learning in early science and the implications for museum exhibit design. Andrew is keen to realise the impact of his work and has spun out two educational technology start-up companies, one of which has developed a product informed by the research presented in his talk.

Twitter: @Numbuko; email: a.manches@ed.ac.uk

## Mon 18<sup>th</sup> June 2018 13.30-14.30hrs



**Dr Manolis Mavrikis, UCL Knowledge Lab**Augmenting teachers' intelligence: a new role for
Artificial Intelligence and Learning Analytics

Drawing on examples from a series of funded projects on artificial intelligence in education (AIED) and learning analytics (LA), I will argue that working in tandem these technologies can augment (rather than replace) teachers' intelligence. I will present how the data that intelligent learning environments generate for the purpose of supporting the learner (e.g. learner modelling, feedback provision, additivity) open up opportunities for supporting teachers, educators and learning designers. The talk will demonstrate that although both areas of research have had significant advances, light integration between the two is problematic and more work is needed to close the gap. This should challenge us all, as designers and developers, to seize the opportunities afforded by the rich technological context but also take into careful account the requirements of our users and the challenges they face.

#### **Biography**

Dr Manolis Mavrikis is an Associate Professor in Learning Technologies at UCL Knowledge Lab. He holds an BSc in Mathematics from University of Athens, Greece with an emphasis in teaching, MSc with distinction in Informatics and PhD in Artificial Intelligence in Education from the University of Edinburgh. His research interests developed over more than 15 years of experience, lie at the intersection of learning sciences, human-computer interaction and artificial intelligence. Manolis's research centres on designing evidence-based intelligent technologies that provide direct feedback to learners, and in employing learning analytics to help teachers, schools, education ministries or researchers develop an awareness and understanding of the processes involved in learning. Manolis has been principal investigator on a portfolio of large interdisciplinary EU projects most recently iTalk2learn, which has received Demo awards in the ECTEL and AIED conferences and an 'Honourable Mention' for potential business impact from the i-KNOW conference.

Twitter: @mavrikis; Email: m.mavrikis@ucl.ac.uk

### Tue 19th June 2018 09.45-10.45hrs



Professor Jane Seale, The Open University with special guests Ajay Choksi, David Banes and Julie Harris Examining the design challenges of the 21st Century through the eyes of disabled people: Openness, Assistance and Participation

In this presentation Jane will share her experiences of working on three research projects that focused on the role that technology plays in the lives of disabled people and with the help of three disability and technology experts, Ajay Choksi, David Banes, and Julie Harris who participated in her research, draw out three key design challenges for the 21st Century.

In a project examining the history of how special needs technology in the UK was developed for and used by people with special educational needs between 1970 and 1999 and how this history might illuminate the current digital divide, Jane interviewed 52 experienced practitioners about their memories of the period. Analysis of these interviews revealed that the period was considered a golden age, where creative practice was able flourish. Jane likened this practice to the 'Open' and Maker movement. David Banes, a participant in this project will share his views on whether the 'Open' or 'Maker' movement can provide ways forward in terms of enabling disabled people to freely share apps or we will always need specialist companies.

In a project called 'Telling Tales of Technology', Jane worked alongside two experienced technology users, with personal experience of learning disabilities, Ajay Choksi and Karen Spencer to enable eight adults with learning disabilities to share their memories of using technologies, from childhood to the present day. To illustrate what we can learn from these stories, particularly about what assists or supports people with learning disabilities to use technologies in a meaningful way, Ajay will share his memories of technology use.

Finally, a current project Jane is working on is an EU funded project called ARCHES (Accessible Resources for Cultural Heritage EcoSystems) which involves heritage and technology partners across Europe. Working in the context of museums, art galleries and heritage sites, the overarching objective of the ARCHES project is to create more inclusive cultural environments for people with differences and difficulties associated with perception, memory, cognition and communication (commonly ascribed labels would include learning difficulties, sensory impairment and hearing impairment). The project partners are working to achieve this by using participatory methods to develop online resources, software applications and multisensory technologies. Julie Harris, a participant in this project will share her experiences of the project so far, and with Jane will reflect on her relationship with the technology and technology partners. Finally, with Jane, will reflect on the challenges to achieving full participation of disabled participants in such a design project and the implications for future partnerships between inclusive researchers, disabled users and technology developers.

#### **Biography**

Jane began working in the field of special needs technology in 1987 when she joined the Computer Applications to Special Applications Research Unit at Keele University. Focusing on health and social care organisations who worked with adults with severe learning disabilities, Jane's PhD explored what factors influenced the effective management and use of computers with this group of learners. Alongside her PhD research Jane worked as a day centre officer for Telford Social Services and as a special needs technology consultant, working with health and social services staff to help them use technology with adults with learning disabilities. In 2000, whilst at Kings College London, Jane designed and co-ordinated the first ever Masters in Assistive Technology in the UK. Jane's research focuses in particular, on the role that technologies play in the lives of adults with learning disabilities and the factors that influence or sustain the digital exclusion of disabled people. Jane's methodological interest is the development and evaluation of participatory research methods that promote voice and empowerment for disabled research partners. Oh, and she likes cats!

Twitter: @janeseale; Email: jane.seale@open.ac.uk