

University of
Hertfordshire **UH**

Learning and Teaching
Innovation Centre



Research Informed Teaching

Learning and Teaching Conference - 28 April 2017



Welcome

Welcome to the University of Hertfordshire's 14th Annual Learning and Teaching Conference.

Our theme this year is 'Research Informed Teaching' and we hope that the conference will enable the sharing of good practice from within, and beyond, the University.

Our theme aligns with both the Education and Research strands of the University's Strategic Plan and we are delighted to welcome Jane McNeil from Nottingham Trent University who will be sharing their institutional approaches to support Research Informed Teaching within her keynote address.

Recognising the success of previous conferences we have moved to the De Havilland Campus and are really pleased to be holding the conference in the Weston Auditorium. Being on De Havilland has also enabled us to have more parallel strand presentations but there were still some very difficult decisions during our shortlisting to identify the 28 parallel presentations from over 50 submissions.

The parallel sessions are identified according to four different strands of activity and delegates are welcome to attend sessions within a strand or to move between strands as they choose:

1. Students as Researchers.
2. Research content in the curriculum.
3. Innovative approaches to teaching research methods/research skills.
4. Pedagogic research to inform and enhance teaching practice.

The afternoon will include 3 minute poster presentations as well as a keynote from our very own Dr Suzanne Fergus who won the Royal Society of Chemistry Higher Education Teaching Award in 2016. Suzanne will share her own examples and expertise in relation to Research Informed Teaching.

Events such as the Learning and Teaching conference form an important part of your Learning and Teaching related Continuing Professional Development (CPD). It is a valuable opportunity to share ideas and discuss Research Informed Teaching with colleagues. We hope you find it an enjoyable, stimulating and rewarding day.

Helen Barefoot

Deputy Director of the Learning and Teaching Innovation Centre

Keynote address 1

Jane McNeil

Director of Academic Development, Nottingham Trent University



Jane McNeil is Director of Academic Development at Nottingham Trent University, where she has an institutional responsibility for educational development and quality management.

With a background combining medievalism and technology, her perspective on learning and teaching has been shaped by her experience as a lecturer, as a practice innovator, and, latterly, as a policy developer.

Her first encounter with institutional strategies to develop research-teaching links was in 2007, when she was asked to promote students' engagement in research. The resulting Scholarship Projects for Undergraduate Researchers (SPUR) scheme has now run for a decade and has many spin-off schemes, offering hundreds of students the opportunity to work within research teams in their summer break. Jane will talk about this scheme and others – some successful, others less so – and share her experience of what has worked to cultivate links between teaching and research. In this, she will, of course, be referring to the work of Healey and Jenkins on developing undergraduate research and inquiry.

Keynote address 2

Suzanne Fergus

Learning and Teaching Specialist and Principal Lecturer in Life and Medical Sciences



Suzanne completed her BSc in Chemistry at University College Dublin and continued there to attain her PhD under the supervision of Prof Frank Hegarty, investigating nitrile ylide dimerisation and the carbene reactivity of nitrile ylides. She undertook post-doctoral work at the University of Milan and University of Cambridge prior to joining the academic team at the University of Hertfordshire where she is now a Principal Lecturer in Pharmaceutical Chemistry.

Suzanne is exceptionally passionate about all things learning and teaching and is currently on her second secondment within the University of Hertfordshire's Learning and Teaching Innovation Centre. Suzanne obtained her MA in Education focusing on student engagement in chemistry and has obtained national recognition as a Senior Fellow of the HEA. Suzanne will share her experiences developing chemistry education research within her professional practice.



Registration and Introduction

9.00	Registration available
9.30-9.45	Welcome and Introduction – Sal Jarvis and John Senior
9.45-10.30	Keynote – Jane McNeil - Research Informed Teaching
10.35-10.45	Questions for the speaker
10.45-11.10	Refreshments and Networking

Parallel sessions

11.10 Parallel session 1

Students as Researchers	Students as Researchers	Research content in the curriculum	Research content in the curriculum	Innovative approaches to teaching research methods	Pedagogic Research	Pedagogic Research
M021	R115	R135	R140	R147	M043	Weston Auditorium
Social experiments: conceiving space between architects and the community Eva Sopeoglou	Student partnership in developing embodied cognition orientated modules in engineering Thomas Baker and Jimi Smith	It's an industry thing – the role of industry research in film and television Chris Chandler	Researching the importance of the humble reading list David Peacock	Research papers and the Guided Learner Journey Jim Collett	It's not about the ..ology...it's about the Pedagogy Sofie Mallick	Investigating research informed teaching: recent insights and future plans Grant Bage

11.35 Parallel session 2

Students as Researchers	Students as Researchers	Research content in the curriculum	Research content in the curriculum	Innovative approaches to teaching research methods	Pedagogic Research	Pedagogic Research
M021	R115	R135	R140	R147	M043	Weston Auditorium
Virtual to Physical Student Exhibition Doros Polydorou	Graduate with more than a degree: an evaluation of an inquiry approach to co-curricular development in the Schools of Education and Humanities Lynn Bhanja and Graça Martins	Teaching the Concealed Revealed Ceri Houlbrook and Owen Davies	Primary Computing Curriculum - New communication and collaboration opportunities for trainee teachers Neil Rickus	Teaching Research Methods and Research Skills Barry Costas	Embedding Research Informed Teaching in the Curriculum Jo Cahill	Rough Guides, Grand Tours and Fantastic Journeys: using maps and narratives to understand processes of learning in Higher Education Erica Liu, Karen Clark, Ivan Phillips and Tony Rosella



12.00 Parallel session 3

Students as Researchers	Students as Researchers	Research content in the curriculum	Research content in the curriculum	Innovative approaches to teaching research methods	Pedagogic Research	Pedagogic Research
M021	R115	R135	R140	R147	M043	Weston Auditorium
Using Robots to Engage Students in Real-World Research through Assessment Design Martina A Doolan and Mick Walters	Iterative Pedagogy: Student Assignments as Secondary Data for Future History Students Adam Crymble	Seeing Clearly: using research-informed content to help meet the challenges of cross-disciplinary teaching. A case study Richard Greenaway	"Hands on" from Theory to Practice in Critical & Cultural Studies Polly Palmer and Julian Lindley	Research-informed teaching: the role of virtual reality and actual fieldwork Phil Porter	Who wins when you try to convince a mouse her best friend is a cat? Questioning the Value of Competitions in Enterprise Education Nigel Culkin and Catherine Brentnall	Exploring Partnership in Higher Education Saskia Kersten and Karen Smith

12.25 Parallel session 4

Students as Researchers	Students as Researchers	Research content in the curriculum	Research content in the curriculum	Innovative approaches to teaching research methods	Pedagogic Research	Pedagogic Research
M021	R115	R135	R140	R147	M043	Weston Auditorium
Research led teaching: Student involvement in an eye tracking study Christina Schelletter	Mini-projects in Level 5 Programming Ralf Napiwotzki	The Design of an Innovative, Immersive, Research Led, Undergraduate Module for Effective Development of R&D Skills and Learning Daniel McCluskey	Engaging Undergraduate Malaysian Students in Research and Inquiry Rosemary Godbold and Louise Lawson	Online research methods resources: their impact on students' research capability and self-view Amanda Roberts and Joy Rosenburg	Developing videos as online teaching resources to support sports therapy practical skills learning Jenny Jones	"Quick Wins for Visiting Lecturers" – Introducing VLs to pedagogic research Lesley Glass, Jan French, Anjana Nathwani, Paul Lawrence, Phillip Sayers, Richard Atfield

13.00 - 13.45 Lunch break

13.45 - 14.15

**Celebration of Success: Recognising our Fellows of the HEA
Professor Ian Campbell**

14.15 - 15.00

Keynote 2: Dr Suzanne Fergus – Royal Society of Chemistry Higher Education Teaching Award Winner 2016

Not all those who wander are lost: chemistry education research

15.00 - 15.15 Refreshments

15.15 3 minute poster presentations

- **Expanding and improving the simulation teaching for pharmacy students**
Marianne Rial and Nina Walker
- **Enriching insights to digital capabilities and the learning and teaching experience through 'persona development'**
Non Scantlebury
- **Evaluation of the NHS England Youth Forum: How service user involvement of young people in healthcare can contribute to the development of research informed teaching**
Julia Petty, Lisa Whiting, Sheila Roberts and Gary Meager
- **Exploring Technological Solutions to Research Methods Assessment: Methodological Storyboarding on the Applied Independent Project (AIP)**
Phil Mason
- **We need to talk about teaching. The benefits of a multi-disciplinary conversation group**
Lesley Glass, Thomas Baker, Janet Barlow, Karen Clark, Julia Hodgkinson, Joy Jarvis, Susan Nimmo, Tony Rosella, Jayne Smith and Rebecca Thomas
- **Mentorship programmes in pharmacy: a review**
Ilhem Berrou
- **Foundations of Cultural Competence**
Mary Deuchar
- **Compassionate Pedagogy in HE group work: Statistical Evidence of Outcomes at UH**
Theo Gilbert, Martina A. Doolan and Neil Spencer
- **Using the Curriculum Design Toolkit to reflect on Research Informed Teaching**
Sarah Flynn

15.45 - 16.15

Expert panel

16.20

Close of conference: Karen Barton and announcement of the Learning and Teaching Innovation Award recipients

Parallel sessions



11.10 *Parallel session 1 - Social experiments: conceiving space between architects and the community*

Eva Sopeoglou



This paper will discuss the participation and dynamics of a live project, which was part of an art-architecture Biennial exhibition. The Architecture programme of the Colombo Art Biennale 2016 (CAB2016) was centred around the slum community of Slave Island district in Colombo, with a strong emphasis on community engagement.

11.10 *Parallel session 1 - Student partnership in developing embodied cognition orientated modules in engineering*

Thomas Baker and Jimi Smith



A reflection on a new student-staff co-created, blended learning “Engineering Fundamentals” module as a response to student feedback on wanting more hands-on practical activities. Using online learning and physical laboratories maximises opportunity for embodied cognition (Claxton 2010) and ultimately for students to build a mechanical device as the assessment.

11.10 *Parallel session 1 - It's an industry thing – the role of industry research in film and television*

Chris Chandler



The film and television (FTV) industries make extensive use of research in business contexts - for example Broadcasters' Audience Research Board (BARB) audience data. For a vocational course, it is essential that there is a sound basis of industry research. Using FTV as an exemplar this session will look at the weight given to industry research, how it sits with 'traditional' peer reviewed research and the benefits of an industry research profile internally and externally.

11.10 *Parallel session 1 - Researching the importance of the humble reading list*

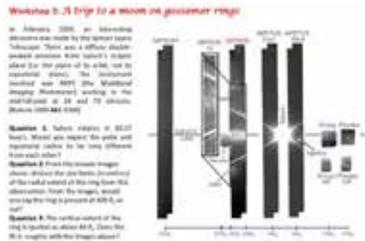
David Peacock



A new Reading / Resource List Management Service (R/ RLMS) is being introduced as part of the Guided Learner Journey. This session looks at the strategic and pedagogic use of reading lists – facilitating a discussion on how we should use them effectively in the future to embed research content in the curriculum and to enhance the teaching and learning experience.

11.10 *Parallel session 1 - Research papers and the Guided Learner Journey*

Jim Collett



I will discuss how research papers have been used to construct workshops at Level 5 and form the basis of semi-prepared exam questions at taught MSc level. In both cases, the content of the papers is challenging so I will share some useful lessons learnt in guidance and scaffolding.

11.10 *Parallel session 1 - It's not about the ..ology...it's about the Pedagogy*

Sofie Mallick



Pedagogical theories for effective teaching and learning – learning theorists and what they share. The presentation will give a tour around the most influential learning theorists and show how their pedagogic theories have influenced the author's work within the Business School.

11.10 *Parallel session 1 - Investigating research informed teaching: recent insights and future plans*

Grant Bage



Grant Bage commenced a five year UH Research Fellowship in October 2016 inquiring into 'research rich and informed teaching'. This presentation explores what that means drawing from insights, issues and challenges from the topic's extensive literature. It also briefly reports on his current UH empirical research, and future plans for investigating student learning.

11.35 *Parallel session 2 - Virtual to Physical Student Exhibition*

Doros Polydorou



This work describes the process of bringing together students from different 5 different courses in the school of the Creative Arts (Animation, Fashion, Fine Art, Jewellery and Graphic Design/Illustration) to create a multi-disciplinary exhibition. Students were asked to create an artwork in a Virtual Reality platform HTC Vive. A selection of artworks were then 3d printed and displayed.

11.35 *Parallel session 2 - Graduate with more than a degree: an evaluation of an inquiry approach to co-curricular development in the Schools of Education and Humanities*

Lynn Bhanja and Graça Martins



Students present an evaluation of an inquiry approach to co-curricular programme in the Schools of Education and Humanities. We discuss the development of this student-initiated, inquiry-based programme which enhances student opportunities to achieve the UH Graduate Attributes and develops their ability to lead their own learning.

11.35 Parallel session 2 - Teaching the Concealed Revealed

Ceri Houlbrook and Owen Davies



What do a shoe, a bottle, a poppet, and a desiccated cat have in common? They're all objects historically concealed in unusual locations within buildings. Why? *The Concealed Revealed* Project has been attempting to answer this question – and so will students in the new History module: 'Witch-Bottles to Wishing Wells'.

11.35 Parallel session 2 - Primary Computing Curriculum - New communication and collaboration opportunities for trainee teachers

Neil Rickus



The new Primary Computing Curriculum provides a significant challenge to trainee teachers, as computer programming, which is unfamiliar to the majority of our students, is now part of the programme of study. During this presentation, we'll examine research outlining collaborative approaches to improving teacher confidence and subject knowledge.

11.35 Parallel session 2 - Teaching Research Methods and Research Skills

Barry Costas



This Presentation seeks to give value to placing the Learner at the heart of their own learning, and uses the concept of learning in, through and about movement in games as a means to explore approaches to teaching research methods and research skills.

11.35 Parallel session 2 - Embedding Research Informed Teaching in the Curriculum

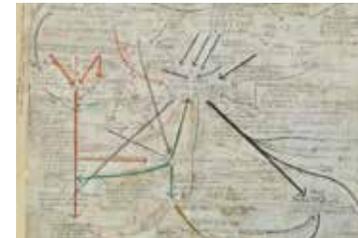
Jo Cahill, Julie Vuolo, Kate Young, Mary Sexton, Sue Murray, Rose Parkes, Lorraine Murray, Julia Jones, Grant Bage, Dominic Bygate



A PowerPoint presentation will be used to outline how this research is being conducted showcasing specifically how the project itself is engaging students, users and carers as participants in the research process.

11.35 Parallel session 2 - Rough Guides, Grand Tours and Fantastic Journeys: using maps and narratives to understand processes of learning in Higher Education

Erica Liu, Karen Clark, Ivan Phillips and Tony Rosella



This workshop will explore some of the ways in which students and staff employ mapping and storytelling techniques to 'make visible' processes of teaching and learning. Staff from Creative Arts will share material developed in their own disciplines, inviting the discussion and demonstration of comparable approaches from across the University.

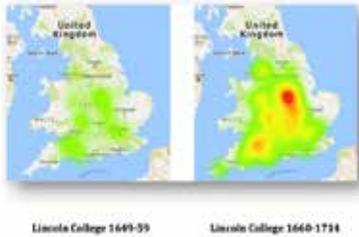
12.00 Parallel session 3 - Using Robots to Engage Students in Real-World Research through Assessment Design

Martina A. Doolan and Mick Walters



To encourage and support the nexus between research learning and teaching within the University; an exemplar of embedding state of the art robotic research into assessment design is presented. Learner attitude was captured quantitatively by means of a questionnaire. Qualitative data was obtained using learners' own reflections of their experience.

12.00 *Parallel session 3 - Iterative Pedagogy: Student Assignments as Secondary Data for Future History Students*
Adam Crymble



What if each wave of students created resources not just for their own use, but also future cohorts? Modules are left richer than when students arrived. This paper shares how history students 'add value' to historical records and how that gives subsequent groups a running start on their research projects.

12.00 *Parallel session 3 - Seeing Clearly: using research-informed content to help meet the challenges of cross-disciplinary teaching. A case study*
Richard Greenaway



A collaborative teaching program between Life and Medical Sciences and Physics, Astronomy and Maths has provided new opportunities to incorporate research-informed teaching into a cross-disciplinary curriculum with the aim of engaging students and addressing some of the challenges associated with teaching across discipline boundaries.

12.00 *Parallel session 3 - "Hands on" from Theory to Practice in Critical & Cultural Studies*
Polly Palmer and Julian Lindley



This Presentation outlines how Theory meets Practice within Contextual Studies. A joint project with St Albans Museum challenges Level 5 students within Creative Arts to contextualise objects from the collection from historical, social, future perspectives. Integral to these challenges is the communication of ideas to a wider audience through pop-up showcases.

12.00 *Parallel session 3 - Research-informed teaching: the role of virtual reality and actual fieldwork*
Phil Porter



In this presentation, the use of Virtual Reality (VR) technologies within a Higher Education setting will be discussed. Merits and drawbacks of educational VR technology will be considered and delegates will be shown a VR package developed at UH, with discussion of potential application to multiple subject areas.

12.00 *Parallel session 3 - Who wins when you try to convince a mouse her best friend is a cat? Questioning the Value of Competitions in Enterprise Education*
Nigel Culkun and Catherine Brentnall



Competitions are widely promoted and, largely, uncritically recommended to educators as a model of good practice, effective for developing entrepreneurial skills and motivating learners. Our research explains why we need to question whether they are an appropriate pedagogy for all learners, at all phases of education.

12.00 *Parallel session 3 - Exploring Partnership in Higher Education*
Saskia Kersten & Karen Smith



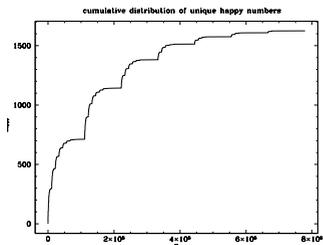
The term partnership is frequently used in Higher Education contexts, but there seems to be little agreement over what it means. Using the results of a project exploring partnership using interviews, focus groups and corpus-based methods, we want to highlight the potential of corpus linguistic methodology for (multidisciplinary) research.

12.25 *Parallel session 4 - Research led teaching: Student involvement in an eye tracking study*
Christina Schelletter



The presentation outlines student involvement in a project on how we access words in the context of an English Language & Communication module. Students took part in an eye tracking study as subjects but also analysed an aspect of the data for their coursework and a presentation workshop.

12.25 *Parallel session 4 - Mini-projects in Level 5 Programming*
Ralf Napiwotzki



We used mini-projects in our Level 5 Programming module in the School of Physics, Astronomy and Maths to introduce students to the research method. Some, but not all, the mini-projects on offer were related to contemporary research. Students were asked to work in groups, write a program to solve a problem and analyse the results.

12.25 *Parallel session 4 - The Design of an Innovative, Immersive, Research Led, Undergraduate Module for Effective Development of R&D Skills and Learning*
Daniel McCluskey



Engineering education has suffered a shift between fundamental engineering and vocational training, resulting in many graduate engineers equipped without a thorough grasp of either skill. We aim to establish whether existing tools for curriculum design can lead to the development of a research informed module that can resolve this gap.

12.25 *Parallel session 4 - Engaging Undergraduate Malaysian Students in Research and Inquiry*
Rosemary Godbold and Louise Lawson



Our session presents the introduction of research informed teaching into a newly revised BSc Hons Contemporary Nursing programme delivered in Malaysia. Students engage in active research and inquiry through literature searching, data collection and analysis from the beginning of the programme right through to their honours project at the end.

12.25 *Parallel session 4 - Online research methods resources: their impact on students' research capability and self-view*
Amanda Roberts and Joy Rosenberg



This seminar explores an evaluation of the use of a set of online resources, designed to support both home and partner organisation students in developing their research skills, knowledge and understanding. It also seeks to raise questions about the impact of these resources on students' self-identification as confident researchers.

12.25 *Parallel session 4 - Developing videos as online teaching resources to support sports therapy practical skills learning*
Jenny Jones



A L&T grant project that evaluated the use of videos in the teaching of orthopaedic assessment techniques in sports therapy students. Students were provided with electronic copies of videos made by UH staff to see the effect it had on student performance, engagement and experience. Results indicate these videos have decreased student stress, improved student orthopaedic handling and increased student grade average.

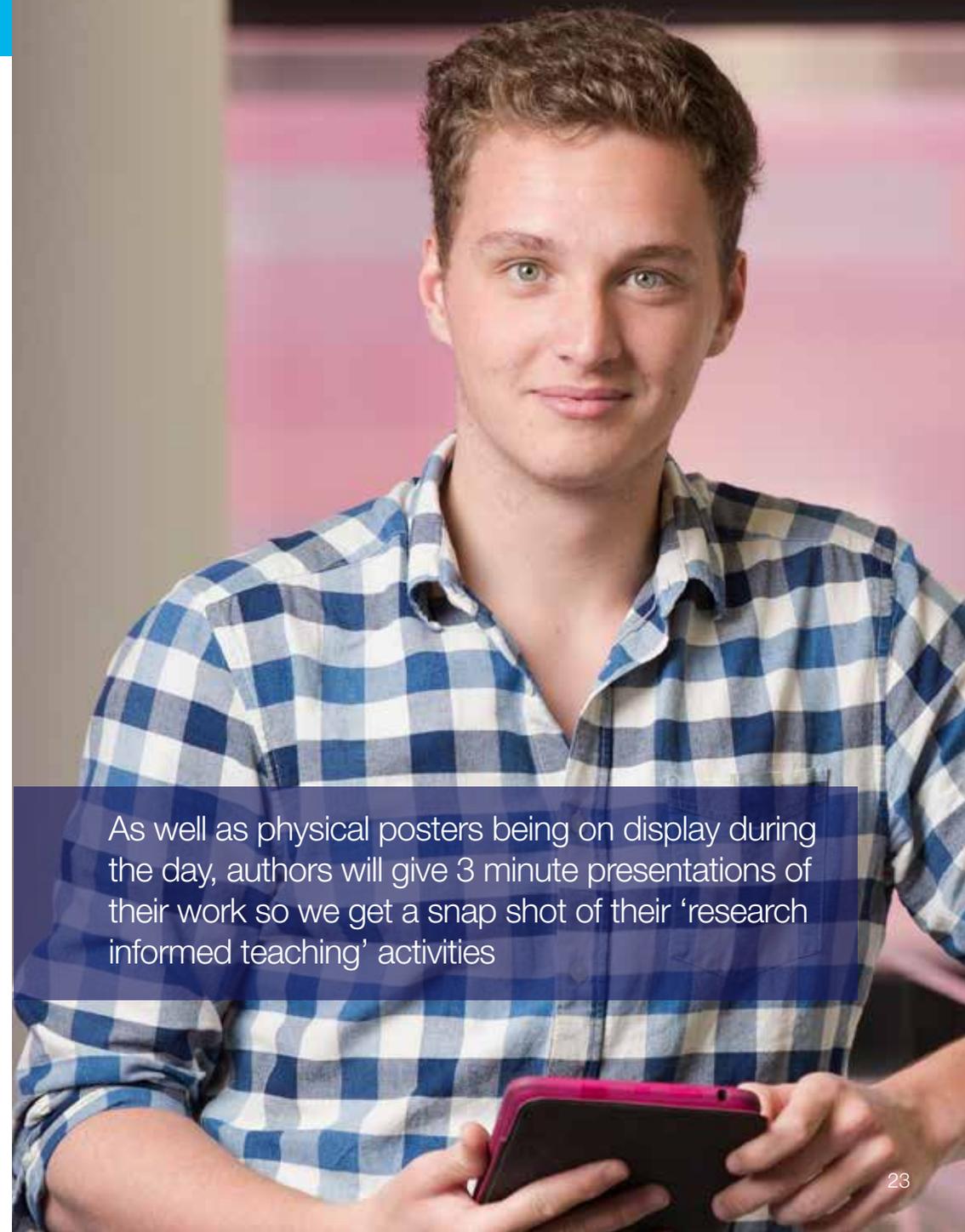
12.25 *Parallel session 4 - "Quick Wins for Visiting Lecturers" – Introducing VLs to pedagogic research*

Lesley Glass, Jan French, Anjana Nathwani, Paul Lawrence, Phillip Sayers, Richard Atfield



UH employs an increasing number of Visiting Lectures, particularly within HBS. We present outputs and findings from our project, which explores the involvement of VLs in paid research and a resulting conference paper at CABS. The booklet produced contains five successful strategies for working smartly to engage students.

Poster Presentations



As well as physical posters being on display during the day, authors will give 3 minute presentations of their work so we get a snap shot of their 'research informed teaching' activities

Expanding and improving the simulation teaching for pharmacy students

Marianne Rial and Nina Walker



Clinical simulation is being used as an educational tool to improve clinical competence in pharmacy students at UH. Detailed student feedback was sought on ways in which this teaching could be expanded and improved in the MPharm degree. In response to this, further realistic case studies were written and videos were made.

Enriching insights to digital capabilities and the learning and teaching experience through 'persona development'

Non Scantlebury



This presentation will share the results of analysing and modelling 'face to face' interview feedback to produce a suite of roles based 'personas'. These personas aim to capture the 'real life' technology experiences and challenges faced by end users engaged in blended learning.

Evaluation of the NHS England Youth Forum: How service user involvement of young people in healthcare can contribute to the development of research informed teaching

Julia Petty, Lisa Whiting, Sheila Roberts and Gary Meager



The poster presentation focuses on how an evaluation study of the NHS England Youth Forum (NHSEYF) (Whiting et al, 2016a) will contribute to research-informed teaching at the University of Hertfordshire. The study and its relevance is congruent with the recent importance and interest in service user involvement (SUI) in education (NHS England, 2015; Omeni et al., 2014).

Exploring Technological Solutions to Research Methods Assessment: Methodological Storyboarding on the Applied Independent Project (AIP)

Phil Mason



The presentation presents on progress towards the advancement of research methods assessment, both formative and summative, on the University's MBA programme. Findings and illustrations of a technological solution are provided, drawing on the practical development of a framework for leading students through methodological decision making.

We need to talk about teaching. The benefits of a multi-disciplinary conversation group

Lesley Glass, Thomas Baker, Janet Barlow, Karen Clark, Julia Hodgkinson, Joy Jarvis, Susan Nimmo, Tony Rosella, Jayne Smith and Rebecca Thomas



In today's time-pressured educational world, the opportunity to talk about teaching seems all too rare. We're a multidisciplinary group who have benefitted from regular conversation about and inquiry into our practice. We invite you to join us to explore your teaching conversation network and ideas of how to augment it.

Mentorship programmes in pharmacy: a review

Ilhem Berrou



This study provides a review of the background literature on mentorship in pharmacy and an evaluation of current pharmacy mentorship programmes. The findings are used to suggest recommendations on instituting a successful mentorship programme in pharmacy in UK.

Good Practice in Research-Informed Teaching...

... Includes outcomes of recent research in the curriculum

... Develops an understanding of the history and role of research in the discipline

... Engages students in discipline-specific research processes

... Engages students in generic research processes and skills

... Fosters an environment where research is encouraged, promoted and valued

... Engages students in enquiry-based activities

... Draws on pedagogic research to enhance teaching and research links

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