

Digital Learning:  
Engage, enthuse, inspire

**The University of Nottingham  
Teaching and Learning Conference  
19<sup>th</sup> April 2018**



**#UoNTLC2018**

# Venue

## **Pope C15:**

- Welcome
- Key note speakers
- Question Time Panel

## **The Engineering and Science Learning Centre, University Park (room details in programme):**

- Parallel sessions

# Schedule

9.00 – 9.30am	Registration
9.30 – 9.45am	Welcome: Professor Sarah O'Hara
9.45 – 10.15am	<b>Keynote 1: Cassie O'Boyle</b> <i>Digital Competencies: life after university</i>
10.15 – 11.15am	Parallel Sessions 1
11.15 – 11.30am	Coffee
11.30 – 12.00pm	<b>Keynote 2: Dr Fiona McCullough</b> <i>Towards a More Effective Pedagogy: blended learning as a tool for flexible course delivery</i>
12.00 – 1.00pm	Parallel Sessions 2
1.00 – 2.00pm	Lunch and Networking
2.00 – 3.00pm	<b>Keynote 3: Professor Phil Race</b> <i>Optimising Learning in a Digital Environment</i>
3.00 – 3.40pm	Question Time Panel Panel Members: Professor Phil Race; Professor Sarah Speight; Dr Fiona McCullough; Cassie O'Boyle
3.40 – 4.00pm	Plenary and closing

# Keynote Speakers

## Professor Phil Race

Phil publishes widely on learning, teaching, feedback and assessment in higher education, and details of his work can be found on his website <http://phil-race.co.uk>. His passion is about 'making learning happen', in an approachable way, without recourse to jargon, acronyms or elitism. He is the author of the 'ripples on a pond' way of thinking about seven factors underpinning successful learning, based on asking over 200,000 people in many parts of the world six straightforward questions about how they learn, and most recently written up in:

- Race, P (2014) *Making Learning Happen: 3<sup>rd</sup> edition*, London: Sage.
- Race, P (2015) *The Lecturer's Toolkit: 4<sup>th</sup> edition*, London, Routledge.

Though essentially 'retired' now, he continues to give the occasional interactive conference keynote, and half-day workshop for teaching staff.

## Dr Fiona McCullough

Dr Fiona McCullough is a dietetics lecturer in the School of Biosciences. Her work as a registered dietitian has influenced the development of the dietetics workforce, during her career in higher education. Beyond her own work she has influenced the development of national education accrediting standards through the professional body. As Chairman, of a European Education and Lifelong Learning Committee she has researched the potential impact of accrediting lifelong learning courses across institutions in Europe. Fiona is also the Chair of the British Dietetic Association.

Fiona considers teaching a 'passion and a work of heart' and has a drive to enable others to increase their understanding and succeed towards their goals. Her commitment to teaching and learning was recognised by the Higher Education Academy through her award of National Teaching Fellow in 2016.

## Cassie O'Boyle

Cassie is the current Education Officer, having commenced the role in July 2017 following her graduation from American Studies and English at The University of Nottingham. During her time as a student, Cassie demonstrated high levels of commitment to teaching and learning through her involvement with the Education Network and her role as Course, Education and Faculty Rep. Cassie is passionate about student voice and the ways in which students can inform practice within the university.

# Information Stalls

## Blackwell's

Blackwell's will be presenting an information stall at the conference, which will provide information on their services that support course delivery at the University. Information will be available on services such as eLearning, Study Skills support and financial solutions for books, as well as hearing testimonies from lecturers who have previously used the services. Blackwell's will also be delighted to share their University Bookshop Trusted Partner strategy and what this means in relation to the University of Nottingham.

## Students as Change Agents (SACA)

On their information stand, students and staff from Students as Change Agents share how the projects it facilitates are impacting the University. Student groups, partnered by a staff member, engage in diverse activities to improve the student learning experience. This flexible scheme, supported by the Nottingham Advantage Award, has gained acclaim in both TEF Gold and QAA reports. Come and hear about this year's exciting projects, including students running creative software workshops in Culture, Film and Media; Psychstart, a mentor scheme in Medicine supporting students aspiring to careers in Psychiatry and two quite different assessment reviews in Maths and Product Design.

## Nottingham Advantage Award

Staff from the Nottingham Advantage Award team will share what this free employability scheme is all about including how it helps to prepare and support students in their personal and professional development. The Award formally recognises student participation in extra-curricular activities as well as helping students to reflect upon their experiences and consider how to demonstrate these skills and experiences throughout the recruitment process. Come and visit the stall to hear about how the Nottingham Advantage Award can help students to connect with their peers, staff from across the University community, and a range of employers. Our employer partnerships also offer students a range of networking and learning opportunities in addition to prizes that recognise the outstanding contributions made by students while on their Nottingham Advantage Award journey.

# Parallel Sessions 1: 10.15 – 11.15am

Room ESLC B01

Chair: Jackie Cawkwell

Author/s: Afsana Begum, Danielle Bowles, Debs Storey and Wendela Wapenaar

Title: The University's YouTube Channel as an Effective Teaching Resource for 21<sup>st</sup> century Students

Abstract: There is a keen interest from students and staff at Nottingham University to use YouTube videos in a blended learning environment. The School of Veterinary Medicine and Sciences has gained experience in developing practical skills videos, using the ['Teaching veterinary medicine' playlist](#) hosted on the [University of Nottingham's official YouTube channel](#). The use of YouTube, delivers many advantages; it supports teaching, learning and assessment and promotes teaching carried out at the University by having these videos accessible to prospective students, parents, industrial collaborators and other stakeholders. This project was funded by a FMHS Education Grant; practical skills videos for veterinary students were developed. In the presentation, students and staff involved in the project will share their experience, demonstrate the framework and explain how videos can be used as feedback to help students with their learning and assessment. Quantitative and qualitative feedback from YouTube viewers, students and staff will be shared to demonstrate the value of this teaching resource. Examples of how YouTube playlists are integrated in the veterinary course will be shared. This project demonstrates the strengths of a collaboration between students, academic and digital development and marketing departments. The resource has open access, and provides a lifelong learning opportunity for alumni to support employability. Having video material available within arms' reach enhances the student experience to review practical skills before, during and after a practical class. During the presentation, we make suggestions for a wider framework for innovative learning using YouTube and ask the audience to volunteer their experiences in this field.

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Author/s: Dr Neil Hughes

Title: Integrating Digital Discussion Boards into Teaching and Learning

Abstract: This paper argues that despite the impressive claims about the affordances of asynchronous CMC, academics motivated to experiment with discussion boards point to disappointing results characterised by infrequent student participation and social disengagement. I, therefore, explore ways of avoiding these pitfalls and reaping the benefits of this valuable learning tool by:

- Integrating discussion boards into their module assessment diets on the grounds that students will be better motivated to participate if their efforts contribute to their final module grade.
- Providing students with clear criteria, including both qualitative and quantitative performance measures, against which the quality of their work is assessed.
- Including as part of the syllabus, a writing workshop on the craft of discussion board writing.
- Providing students with exemplars of best practice.
- Offering opportunities for feedback on draft discussion board contributions outside the classroom.
- Setting out some more 'low stakes' alternatives to discussion boards.

- Author/s:** Charlotte Good, Rosanna Kirkwood and Sabine Töttemeyer
- Title:** Using Interactive Online Game Kahoot as a Continuous Feedback Approach throughout a Veterinary Year 1 Module
- Abstract:** Lymphoreticular cell biology (LCB) is a conceptual module with self-directed elements (SDLs), which year one veterinary students often have difficulty with. In the past, engagement and attitude of the students towards the module have been quite poor and this has been reflected in both, module feedback and exam performance. Our aim was to improve student engagement and provide continuous formative assessment with instant feedback. This was achieved through the interactive online game Kahoot that allows content knowledge testing. As the student can log-in with nick names it is a low stake assessment where students feel safe to participate without risking judgement by peers and staff on their performance. To use a game for repeated testing would allow students to consolidate and embed their knowledge. The game was used as part of lectures but also timetabled mid-week after self-directed learning sessions and end of week wrap up sessions.
- The use of Kahoot clearly increased student engagement as the mid-week sessions were attended by about 50-90 of students (out of 160 students in year 1). In previous years only very few student accessed drop-in sessions that were provided or used the online discussion forum, both of which are not anonymous. Student feedback collected automatically at the end of Kahoot sessions showed that 86 -100% learned something through the game. Module feedback included very positive comments on Kahoot, highlighting it is fun, helped with knowledge consolidation, identifying gaps in knowledge and reassurance and confidence building.
- Author/s:** Mike Cook and Helen Cowley
- Title:** Learning from SET: what students say
- Abstract:** In addition to 'satisfaction scores', many students also add comments (over 26,000 last year) to their SET responses. These often justify and illuminate their scores, and provide a rich vein of data, which is useful, interesting and often witty. This paper seeks to make use of this large amount of qualitative data to answer the question 'what do students like/dislike about the teaching at Nottingham?'
- The paper will begin with an overview of the SET process to set the context of the investigation. It will then identify a range of key areas which students feel strongly about with regard to teaching, and illustrate these with a summary of the feedback and examples of verbatim comments (anonymised!). Example of the issues, which will be examined are: **success factors** (what do students say about their favourite lecturers? What do they like about their lecturing style?); **audibility** (pace of speaking, accents, volume and use of microphones); **classroom management** (policy on latecomers, finishing on time, responding to questions and a variety of opinion on the use of humour); **technology enhanced teaching** (what works, and why? And what doesn't?); **pitfalls** (what do students dislike?); **eccentric behaviour by lecturers** (should I sing to the students?).
- The paper will finish with a summary of tactics, which lecturers can employ to earn the ultimate student accolade: Legend!

Author/s: Luke Lynch, Debra Henson, Emma Glover (Content & Outreach Executive at Hallam Internet) and Chloe Fair (Senior SEO Executive at Impression)

Title: Building students' digital capabilities through employer partnerships?

Abstract: The Digital Marketing Academy is an optional learning-for-employability initiative, designed and delivered by the Careers and Employability Service in collaboration with Nottingham-based digital marketing agencies Impression and Hallam Internet. The theories of active and experiential learning which informed the Digital Marketing Academy's design will interest academics who see their roles as facilitators of self-initiated learning. Colleagues may also consider this partnership approach to learning and teaching transferable to the task of embedding professional competencies into the curriculum.

In brief, the inaugural 2017/18 edition of the Digital Marketing Academy consisted of:

- An evening event in November 2017, at which Impression and Hallam showcased real client work to 63 students.
- An option for students to secure an insight day with Impression or Hallam in March 2018 by undertaking approximately 15-20 hours of self-driven, digital marketing-related learning.

Debra and Luke of the University's Careers and Employability Service will share the rationale behind the initiative as well as evidence of its impact on individual students. You will also hear two of our employer partners, Chloe Fair and Emma Glover, give their thoughts on the benefits of this type of collaborative delivery to their organisations, the city of Nottingham and our students' employability.

Author/s: Ricky Yuk-kwan Ng, Dave Towey and Tianchong Wang

Title: Where is Learning: Proposing the Fourth Dimensional Learning Space of Vocational and Professional Education and Training (VPET) in Hong Kong

Abstract: Learning spaces should complement learning needs and pedagogical practices. Advancements in technology have created a new dimension of learning that enables open, online, flexible and mobile learning. Architecture and environments in the education institutions are means of intentions, passions and actions to enable learners to immerse, infuse, inspire and inform their learning (Ng, 2013). Accordingly, this paper discusses the concept of 'where is learning' and 'situated learning'. This paper articulates Burden's (2015) 'third dimension of learning' and argues that the availability of technologies can generate a 'fourth dimensional' learning space that facilitates innovative pedagogical practices, enabling open and flexible education that can accommodate vocational and professional education and training's (VPET) needs. The empirical study in this paper used questionnaire surveys, focus groups, and interviews with a range of VPET stakeholders in Hong Kong for the identification of specific instructional strategies to derive innovative pedagogical practices. Findings have revealed that technology enhanced learning (TEL) would be an enabler to create a 'fourth dimensional' learning space that enables flexibility, timely responses, and peer collaboration to accommodate VPET students, teachers and workplace mentors' learning and teaching needs. Our findings further suggested that, to cater the diverse learning preferences for students, particularly the VPET students, the appropriate use of various kinds of media and representations is necessary. Last but not least, we identified the blend of face-to-face teaching with on-line or mobile learning as the feasible approaches for the promotion of Hong Kong VPET students' motivation and interaction.



**Author/s:** Stephen Greedy, Daniel Fallows and James Bonnyman

**Title:** Using Tablet Type Devices to Improve Student Engagement and Motivation within a Project Based Learning Environment

**Abstract:** The Department of Electrical & Electronic Engineering at the University of Nottingham has recently redesigned the way its courses are delivered. As part of this work a significant project-based module, accounting for one third of the year's activities and assessment, was introduced. The module is centred around seven full weeks of design studio-based activity that allows for the rapid development of key practical skills and creativity, whilst encouraging the students to think like engineers. All of which are attributes highly desired by employers.

For many students the thought of working in a small team of people they have just met to tackle substantial design problems is a daunting prospect, one of the key challenges therefore is maintaining the student's engagement and motivation, both as individuals and collectively as a group. Rapid feedback on progress and attainment in assessed elements of the module is therefore crucial; without this students can become demotivated which may lead to disengagement with the module, resulting in a negative experience for those individual students and the group as a whole.

The paper proposed here will demonstrate the value in the use of tablet type devices in supporting assessment, feedback and engagement within a project-based learning environment. Approaches to the; provision of immediate, in-class, feedback on assessed components of work; sharing of good engineering practise as it is observed in-class; mechanisms for progress tracking to identify students in difficulty will be all be presented.

**Author/s:** David Hodge

**Title:** Designing an Embedded Computing Portfolio in a Maths Module

**Abstract:** A few years ago, I was tasked with the creation of a new module for third year mathematicians on topics related to algorithms. With an identified need to provide more of our undergraduate mathematicians with computing experience for future careers this module was a perfect opportunity to embed some specific but also transferable computing skills the syllabus.

Decisions needed to be made concerning module prerequisites, which would greatly affect the reach of the module and also the possible depth of study. Around the core lecture materials were created a series of computing classes and exercises which students attempt individually to reinforce the lecture material learning while at the same time receiving assessment credit for 'evidence of engagement and learning' with computing programming and general scientific computer skills. I will discuss how this was achieved through a novel coarse mark scheme along with lessons learned over the now five years of running the module. This presentation will contain: some examples of exercises and student work; how more transferable skills were later added to the demands; a discussion of benefits and pitfalls of trying to administer an 'evidence of learning' mark scheme for computer code; and a summary of the common themes in feedback received from students after taking the module which should of use to others considering similar initiatives. The module itself has proved enormously popular, very quickly becoming one of the largest third year modules in mathematics and is highly rated by students.

Author/s: Dr Rossana Wright

Title: Teaching Chemistry Using Tablets: just what the doctor ordered

Abstract: Tablet technology is improving at an incredible rate presently, and the improvements seen in the last year have significantly reduced the gap between the convenience of “freestyle” pen and paper vs. the stylus on screen. With the latter overcoming many of the objections focused on the lack of flexibility in marking solely via highlighting and adding comments.

I will present different uses of tablets, by both staff and students, in our School. Three areas will be explored: students using tablets in the undergraduate laboratory; the use of tablets in marking electronically-submitted coursework; and the use of tablets in the lecture room. A recent upgrade to our teaching laboratory has resulted in every student having their own tablet. The benefits of this are manifold. Experimental procedures, including videos and animations of key techniques, are available at a click/tap. Notes taken while performing the experimental work, including data collection and analysis, are now saved in digital form (scraps of paper or printouts are no longer lost or chemically contaminated!), facilitating online submission.

The use on tablets for marking electronically submitted work are well known. The greatest challenge, particularly for STEM subjects, has been the lack of flexibility in providing meaningful feedback for equations, chemical reactions and diagrams. The annotating capabilities of the latest tablets solves this issue. Lastly, the use of tablets by staff in the lecture room allows “live” examples to be tackled, and easily saved electronically.

Author/s: Rozilini Mary Fernandez-Chung

Title: 21<sup>st</sup> Century Teaching Partnerships: avoiding policy pitfalls and enhancing student experience

Abstract: The unique position of Nottingham with its global outreach is often cited internationally as an example of a working transnational education model. The basis for this recognition is the concept of a three-campus, one award model. However, the well-balance quality assurance structure, academic policies, regulations, and the implementation of the same are some of the primary reasons why Nottingham’s globalisation model works.

Today, with well-established campuses outside the United Kingdom, Nottingham continues to remain innovative in expanding its global footprint strategies. These new strategies cannot be developed and implemented in isolation. Rather, there is a need to review some of its policies particularly those affecting off-campus student and staff expectations.

This paper shall, through selected case studies, demonstrate the impact of policies that influence student experience within teaching partnerships. It shall demonstrate, for example, how technology enabled learning poses no problem for on campus students, but becomes a major obstacle for students studying away from campus, particularly in the context of developing countries. This paper will also illustrate how the changing higher education landscape in South and South East Asia places a greater responsibility on policy-developers within the University to engage global colleagues more methodically to ensure teaching partnership-related student experience and expectations are met.

Author/s: Dr Andy Fisher

Title: 'Sorry, I'm being such an academic!': a suggestion as to why (some) academics struggles with the use of technology

Abstract: This presentation presents a novel suggestion as to why academics might struggle in using technology. It proposes that *being an academic* is itself a stereotype threat, which can impede the academic in teaching, and in particular in the use of technology in the classroom. The mechanism for this and possible ways of responding to the threat are discussed. The hope is that this gives us both practical ways of improving academic performance but also opens up various ways of advancing discussion. The paper is then a suggestion, and a call to open up a new and potentially exciting research avenue in Teaching and Learning scholarship.

Author/s: Cristina De Matteis, Neil Hughes, Glyn Lawson, Nick Mount, Cecilia Gorla and Richard Windle

Title: Digital Directions

Abstract: The application of digital technology to learning and teaching is moving at a fast pace, offering unprecedented opportunities for both learners and teachers alike within Higher Education. Not only does it have the ability to challenge how we teach, but also what we teach, who we teach, when and where we teach and who teaches. However, it is essential that developments in this area are targeted, well planned and led by evidence-based practice and pedagogical considerations. As part of its £90 million digital transformation project, the University of Nottingham has recently appointed Digital Learning Directors (DLDs) for each of its constituent faculties. As a group of DLDs, our first aim is to determine the priorities and directions for digital learning from each of these faculties and then to begin to formulate a digital learning strategy for the University, identifying areas of similarity, but also reflecting important subject-specific differences. To do this, we have begun a process of consultation across the institution, looking at current practice and exemplars, and exploring areas of importance for expansion and innovation. Initial projects include requirements gathering for lecture capture software and "thin-client" computing. We are also investigating the barriers and drivers to digital learning implementation, metrics for growth, quality and institutional change. Here, we will present our initial findings, but more importantly, there will be an opportunity for you to contribute and influence the discourse about student and staff expectations around teaching and learning in a digital context at the University of Nottingham.

- Author: Jim Greer
- Title: Nottingham's International Campuses and eLearning: Comparison to Delivery of an Irish National Shared Curriculum
- Abstract: The Irish national initiative INSPIRE was designed to link nanoscience education across ten academic institutions. Learnings from INSPIRE obtained from conception to delivery are presented and recast within the context of the University of Nottingham's tri-campus structure. Participating institutions ranged in size between <10,000 to >30,000 students with corresponding faculty sizes. INSPIRE's aim was to leverage expertise offered by partners by providing access for the national PhD student community. Three mechanisms were used for inter-institutional delivery of modules: a) on-line delivery by recorded lectures and streamed tutorials ('flipped classroom'); b) video conference streaming to multiple sites; and c) 'intensive modules' with on-site attendance. Generic and transferable skills modules were included. There was also a focus on commercialisation training for technologists.
- Some things worked and other things clearly did not- for delivery, this very much depended on the module content. Of equal importance is the logistics of module approval and registration of students, and crucially module accreditation and recording of results. The Irish university system is inhomogeneous with respect to curriculum, administrative procedures, and technologies chosen for e-learning. Whereas challenges for a distributed teaching and learning environment is compounded by the distances between the University of Nottingham campuses, there are shared curricula and administrative procedures. This shared academic culture bodes well for a similar distributed learning environment for the global Nottingham student community.
- Author/s: Dianne Bowskill, Kirstie Coolin, George Gadd, Kamila Januszewicz and Alison Mostyn
- Title: Academic and Learning Technology Partnerships: a way to create and support learning
- Abstract: Non-medical prescribing (NMP) is a challenging 6-month course taken part-time whilst working that awards health professionals the same prescribing authority as doctors. In 2015, Nottingham successfully bid to deliver prescribing education in Kent, Surrey, Sussex (HEKSS). This commissioning required a reorganisation of the face-to-face model to accommodate a geographical and digitally distant cohort. Our aim to develop and deliver a successful flipped-distance NMP course meant a novel and creative approach to delivery and assessment was required. The flipped-distance model requires students to develop core knowledge through distance learning materials (18 days) whilst 8 face-to-face days enable knowledge application. HELM collaboration enables: the integration of complex concepts and through a series of interactive case studies developed with HELM. Students practice integration in a safe, clinically relevant environment; multiple technologies with a mixed technological-ability group presented technical queries. HELM development of a communication statement provided one-stop document for student support; simulated patient consultation was not possible in a hotel, and clinical recording presents significant patient confidentiality and encryption barriers. HELM resolved security by video upload into Moodle, enabling moderator and external examiner viewing. Student feedback from cohorts 1-3 were hugely positive with no significant difference in pharmacology exam marks between traditional and flipped-distance students (Nottingham 83.9±1.7; HEKSS 83.1±1.3%, P=0.7). Consistent support from the Head of School enables HELM to embed expertise and innovation in the School and to compete in a globally competitive market. Without partnership working, we would not have achieved our aim nor sustained the innovation.

Author/s: Dr Andy Townsend and Dr Mary Bailey

Title: Transforming Teaching through Collaborative Inquiry

Abstract: This presentation will report on a project undertaken in the School of Education to stimulate teaching innovation through collaborative inquiry. During 2017, staff, often working with students, to develop innovative approaches to teaching, undertook five innovative projects. As a school with a significant proportion of the online students in the university, all projects made use of digital learning in some way. The projects were initiated at a sandpit event held in March 2017. Staff attending were asked to work together in groups formed at that event to present a proposal for a particular project. The focus for these projects were not pre-determined but had to be developed through discussion. This led to a constructive and collegial workshop that allowed those most involved with the educational work of the school to determine priorities for development. The projects were:

- Understanding student and staff perceptions of good scholarship.
- Developing an online space for building communities of inquiry.
- Encouraging students to engage with online feedback.
- Forming online communities of alumni and current students.
- Documenting the experiences of teacher education students for future cohorts.

This presentation will provide further details on specific projects, but will also draw on interviews with participating staff to reflect on the process and comment on the place of collaborative inquiry in developing innovation and fostering a scholarship of teaching and learning. Building on this success, we are planning to establish this Teaching Transformation Sandpit as an annual initiative.

Author/s: Richard Harris, Emma Ahern, and David Valentine-Hagart

Title: Enhancing staff and student experience with Office 365

Abstract: This interactive workshop will provide you with an opportunity to explore Teams and OneNote for collaboration, as well as gathering feedback via Forms (subject to time availability).

# Parallel Sessions 2: 12.00 - 1.00pm

Room ESLC B01

Chair: Cora Lindsay

Author/s: Neil Hughes, Lan Lo and Sujing Xu

Title: Blended Chinese Language Learning design: an integrative review and synthesis of the literature

Abstract: This paper addresses a number of questions in the emerging area of blended Chinese language learning design. First, what are the strengths and weaknesses of the extant literature? Second, how might insights from the wider blended and blended language learning literature advance the field? Third, how might these literatures be synthesised to produce a set of parameters for effective blended Chinese language learning design? Fourth, what might a course based on these parameters look like in practice? The review of relevant literature, identified via a Google Scholar search, is carried out using an integrative literature review methodology. This approach proves a useful vehicle for critically evaluating the state of the literature and for developing practical guidance for blended Chinese language learning designers based on a synthesis of findings from the review with valuable insights from the wider blended language learning research. The design parameters that emerge from this process (mode, integration, research, asynchronicity, challenges, learners and evaluation, with the initial letter of each of the parameters providing the acronym MIRACLE) are discussed in turn and their applicability demonstrated using examples from a beginners' Chinese language course delivered at the University of Nottingham in the UK.

Author/s: Dr Martha Jones and Dr Xin Gao

Title: Creation of a Web-Based Resources for International Alumni and Language Students on MA programmes; innovating student learning and redevelopment of curriculum

Abstract: In preparation for the launch of the new version of three MA language teaching programmes in the School of Education in September 2017, contributions from alumni in the form of narratives of career pathways, teaching practices and critical incidents were solicited. The three programmes concerned are the MA TESOL (Teaching English to Speakers of Other Languages), MA TEAP (Teaching English for Academic Purposes) and MA TCSOL (Teaching Chinese to Speakers of Other Languages). This presentation details the development of a web-based resource, the International Language Teaching Alumni Resource (ILTAR) that was made possible by these contributions. Built upon the momentum gained through student participation on the discussion boards in the MA modules, the ILTAR encourages alumni to share lived, vivid and authentic work experiences and international perspectives through audio, video or print contributions. Examples of alumni's truly international experience have been incorporated within the current revised versions of our language education MA courses. The resource thus provides prospective students with up-to-date information on future career possibilities in language teaching worldwide. The audience will see how some teachers have moved across from a previous qualification and career path in another discipline into language teaching, whilst others have been promoted since graduation and have moved up the career ladder into exciting opportunities in syllabus design or leadership roles. The ILTAR resource is a growing open education resource, and as more students from MA programmes graduate, more stories will be added.

Author/s: Richard Windle, Heather Wharrad, Michael Taylor, Stathis Konstantinidis and Katherine Whittingham

Title: Benefits and Challenges of Sharing and Reusing Learning Content Internationally

Abstract: Ten years on from the influential OECD (2018) report on the importance of open educational resources, we reflect on the impact that they can have at an international level, based on our experiences of developing and openly sharing content for nearly 20 years and from adopting content from EU digital content sharing partnerships. The 250 health-related resources developed at Nottingham are currently being used in over 50 countries worldwide and accessed by 1.5 million users (2014-2017). Reuse was observed not only by formal learners, but also by teachers, health practitioners, patients and carers, showing their wide collaborative learning potential. Resources adopted from other European partners did perform effectively in the UK. However, only after a significant amount of time-consuming adaptation for translation, but also to reflect the contextual and cultural differences in healthcare between countries. Both experiences highlighted the importance of collaborative engagement when developing products with the greatest reuse potential. The resources created in Nottingham were done so with student and patient co-authorship. This appeared to align them more fully to the needs of the wider reuse community, whereas in the EU-based projects, initial joint authoring by all partners in later projects was used to offset the amount of post-production repurposing required. Additionally, the size of resources appeared to impact on their reuse potential, smaller, more granular resources being easier to assimilate into courses of study.

Author/s: Dr Leah Ridgway, Dr Steve Greedy, Dr Steve Bull, Dr Ed Christopher and Daniel Fallows

Title: Learning Technologies to Support Group Project Work in Undergraduate Laboratories in Electrical and Electronic Engineering

Abstract: Following the 2015 Course Review, UG programmes in the Department of Electrical and Electronic Engineering were updated, answering the question "What should an EEE graduate look like?" The new programme concept uses long-term project-based learning modules as a platform for building better engineers. These modules utilise problem based learning to support the development of academic skills, collaborative working, and soft skills in conjunction with more traditional methods of teaching. All students undertake a 40 credit laboratory group project in year 1 with "lab weeks" where students spend extended periods in the laboratory. Working as groups they develop solutions to engineering challenges, whilst being supported by their tutor in developing group-working skills, Year 1 groups use a Sharepoint site to publish daily blogs and share files such as code listings and diagrams needed for their reports. Year 1 laboratories are designed to encourage collaborative working both in-person and electronically to prepare students for their careers as professional engineers. A Moodle forum is used to provide support between project weeks. In advance of each assessment, there is a FAQ thread that is updated when students ask questions. Of the 102 registered students, 94 have viewed the forum and 47% have viewed ten or more times. This paper details our reflections on the use of different technologies to support project based learning and which have been most effective with views from both staff and students presented.



Author/s: Lucy Cooker and Dr Anne Emerson

Title: 'More contact. That is surely the way to build relationships': personal tutoring and pastoral support in the digital space

Abstract: Abstract: Our research is premised on education being a 'relational process' (Haynes & Macleod-Johnstone, 2017 p.182) and, therefore, all students need to develop trust in their tutors (Frymier and Houser, 2000). In a face-to-face arena, trusting relationships are built over time through personal contact; for distance students this is not so simple. The University Quality Manual does not include the term 'pastoral support', rather there is a model of support and guidance which is predominantly 'professional' (Bailey, 2017; Earwaker, 1989). In this model, academic staff are seen as amateurs whose role is to refer students to more qualified personnel in welfare services through the personal tutoring network. If this model were to work in the digital space students would need to have access to all welfare services provided by the university. Our presentation opens a conversation about the appropriateness of the model of personal tutoring for distance students, which puts the onus on tutors to provide pastoral support in the absence of access to welfare services. We report on a survey in which we asked a sample of part-time Masters students on distance (n=57) and blended learning (n=82) courses about their needs, expectations and experiences with regards to pastoral support. c60% of our participants reported building a supportive relationship with a tutor and although this does not equate to pastoral support it suggests that, despite the complexities, there are ways to do this in the digital space. We discuss the needs of the remaining students and how these could be addressed.

Author/s: Jessica Mead, Danielle Bowles, Stathis Konstantinidis, Simon Patchett and Wendela Wapenaar

Title: Blended Learning – using a sustainable open access platform for interactive digital learning using Open Labyrinth

Abstract: Employing innovative e-learning methods to deliver veterinary education in the undergraduate curriculum is essential to maintain and improve the high quality education which centres on the individual student experience. Open labyrinth (OL) is an open source software package to develop virtual cases for distance learning (<https://youtu.be/hB5835MdGo>). OL provides an easy-access interactive group work environment, which encouraged students to have in-depth discussions around clinical cases. The ability for the student to access the material at any time in any place enhances the student experience and provides students with a safe and transparent environment to evaluate approaches, understand processes and develop their learning. A FMHS Education Grant enabled to continue the innovative work started in the Faculty of Medicine and Health Sciences. Two undergraduate students (DB, JM) collaborated and developed existing cases into an interactive OL format.

Common clinical case scenarios were used to encourage students in groups to work through the decision making process involved. Academic staff involved reviewed progress of all groups throughout and after the session and could therefore target feedback specifically to the areas of concern derived from the collected learner analytics. In this presentation we will present the examples of cases and associated learner analytics and discuss how this aligns with the development of innovative practice within the university. We will also provide a brief demonstration on the use of the software.

- Author/s: Andrew Lee, Frank Coffey and Richard Windle
- Title: Up-Scaling Learning Technology: the evolution of e-learning in a University Hospital Emergency Department
- Abstract: As organizations grow, their need for e-learning changes quantitatively but more importantly it also changes qualitatively. New types of e-learning, developer flexibility and data structures are becoming necessary in large scale projects. This session seeks to examine the changing role of e-learning when adopted by large organizations and departments. E-learning when created for modest groups of learners is often instructional with a clear learning outcome. If e-learning is up-scaled to a larger organization, often a greater range of e-learning types are required. The Department of Research and Education for Emergency Medicine, Acute Medicine and Major Trauma (DREEM) at Nottingham University Hospital is collaborating with the Nottingham University School of Health Sciences to create a website with multiple e-learning features. This collaboration is centred on using e-learning to meet the growing challenges of a modern emergency department: ever greater inter-professionalism and the need to update clinical practitioners with new methodologies at an ever increasing rate. E-learning content is provided in the form of Drupal 8 modules, Reusable Learning Objects, Moodle integration, podcasting and access to educational resources. However, it also requires the developer to allow the educators to become developers themselves, using a Content Management System and its templating component. By using innovative activity rich templates, users become content authors and e-learning creators, a fully collaborative learning environment can emerge. In this process, research and education are merged in the most efficient way, thereby improving clinical practise. The session will include the demonstration of a website and a power-point presentation.
- Author/s: Stathis Konstantinidis, Aaron Fecowycz, Kirstie Coolin, Richard Windle and Heather Wharrad
- Title: What big educational data offer to contemporary healthcare curricula?
- Abstract: The inclusion of ICT in healthcare education is a fact nowadays. Virtual Learning Environments (VLEs) are well established and modules can be designed in different ways. Thus, the types and the importance of the different elements of the online modules may vary a lot. The footprint that learners leave behind accessing the VLEs, namely active data or paradata, can reveal learner engagement and predict their performance, but also signposts the different module designs and the way that modern curricula are structured. A Learner Activity Taxonomy (LAT) created in order to describe the different elements of VLE modules and provide visualisation useful to module designers. Different elements of VLE modules (e.g. forum, module handbook, presentations, etc.) assigned to different LAT categories by the creator feeding the different modules visualisation. We applied to practice the aforementioned LAT in order to showcase the importance of such visualisations, hoping to enhance the contemporary healthcare curricula. Stakeholders that can benefit from such data include not only students who can receive detailed feedback and identify areas of improvement, but also health educational content providers enable them to improve their content; health schools allowing them to understand the effectiveness of their teaching and learning methods, online learning resources, and tutors; and also health education policy makers providing the tools to better evaluate and understand the needs of healthcare curricula.

Author/s: Kyle Galloway

Title: Doing it for themselves: students creating high quality peer-learning environments

Abstract: To support our students during their study and exam preparation we have developed a novel synoptic revision exercise using the online PeerWise system. Academic staff involvement was passive after introducing the assignment to the cohort via scaffolding activities, thus generating an entirely student-led peer-learning environment for the task. Student engagement exceeded all expectations with high levels of activity and peer-learning occurring over a very wide range of topics. We discuss the student engagement data and correlation to improved performance in summative end-of-year examinations. We also present analysis of the quality of the student generated content and the nature of student interactions in a peer-review environment.

Author/s: Judith Wayte

Title: Developing Students' Digital identity through guided On-Line Networking

Abstract: Over the last couple of years undergraduate Bioscience students have been encouraged as part of professional skills modules to think about their professional on-line identities and how these identities may be different from their personal identities. Professional Skills modules aim to get students thinking about future career pathways and provide students with an opportunity to acquire some of the professional skills employers seek. Fundamental skills such as [digital capability](#) and interpersonal skills such as [professional communication](#) are key parts of this. Students are introduced to networking both on-line and face to face and encouraged to think about how they want to portray themselves professionally. As part of on-line networking, four Twitter chats have taken place to give students an opportunity to think about their on-line identity as well as thinking about which scientists they want to network with and the conversations they would like to be having. The Storify example gives a summary of some of the conversations that happened and how students collaborated together. Twitter chats are good for students who may not always be as confident in face to face networking opportunities and gives students the opportunity of having global conversations.

Author/s: Paul Dempster

Title: Live-Streaming as a Basis for Next generation Virtual Learning Environments

Abstract: Constant technological change and shifting learner demands require regular planning for the future. The next generation of virtual learning environments may be significantly different from the current centralized systems in place. One concept under consideration is "pop-up VLE's", which are a series of lightweight tools that are simple, focused, and easily deployable by instructors when required. While the concept is well discussed, what foundations to build these focused tools on are less clear.

Online video live-streaming is considered as a foundation for future VLE's. Live-streaming, the online equivalent of a live broadcast, is an increasingly common medium of consumption for core learning age-groups. In contrast to traditional live broadcasting, it is usually highly interactive, both between viewers and directly with the presenters in the stream. Presenters typically alter their output in real-time in response to the stream of input from the viewers live chat.

In this work, the current landscape around pop-up VLE's is explored. The applicability of live-streaming-style models to learning and VLE's for non-remote, in-class education is considered. After examining the potential positive and negative effects on facilities and space use within a campus, the design of a live-streaming based pop-up VLE called Monolith is given. Monolith integrates multiple-stream live video with real-time lecture feedback, live chat, and electronic whiteboards. We argue that this provides students with a more engaging in-lecture experience while also addressing issues of space design and student-centred expectations.

Author/s: Kate Simpson, James Henderson and Simon Riley

Title: Digital learning Culture and Simple, Honest Dialogue

Abstract: A blended learning model of 50% digital media and 50% traditional teaching methods was introduced in the School of Health Sciences undergraduate nursing programme in 2012. However, anecdotal evidence shows that student engagement with the approach is poor and there is a need to address this. The advent of a new nursing curriculum in 2019 has provided an opportunity to critically review the existing programme. During the conference, we will present findings from students, staff and learning technologists who have worked collaboratively to evaluate the current approach. By facilitating a relaxed and collaborative environment a group of students critically evaluated digital content. This provided some eye-opening data on the pedagogical rigour applied to the programme and allowed us to start to approach the challenges in improving student engagement.

Speaking face-to-face proved powerful and allowed professional hierarchies to be set aside, provoking challenge and criticism without threat. Translating these into the optimal learning experience by improving relationships between digital and traditional can improve student engagement, NSS, impact on University reputation, employability and the nursing profession as a whole.

We will explore the potential of this approach in a wider University context through debate and discussion regarding the learning needs of the 21<sup>st</sup> century student.

Author/s: Dr Holly Blake, Emily Gartshore, Lydia Briggs and Steph Knowles

Title: Digital Interventions for Health and Well-Being in the NHS Workforce

Abstract: There is a national drive to improve the health and wellbeing of NHS employees, in particular, frontline care staff. Nottingham University Hospitals NHS Trust hosts one of the largest workplace wellness programmes in an NHS setting in the UK, providing services and facilities to encourage all employees to make healthier lifestyle choices. We report on the pedagogy, development and implementation of two digital interventions for employee wellbeing created in partnership between this employer and the Digital Innovations in Healthcare and Education (DICE) research group. Firstly, a *Workplace Wellness* e-learning tool focusing on six key areas relating to workplace wellness: work-related stress, musculoskeletal disorders, diet and nutrition, physical activity, smoking and alcohol consumption. The package provides guidance on actions that could be taken to improve these areas of health within a workplace setting. Secondly, *HAWN Training*; a digital health and wellbeing package specifically for nurses and midwives, providing evidence-based information and support on: diet; physical activity; sleep; mental wellbeing; shift work and health; work breaks; and workplace rights. The packages include efforts to maximise interactivity and engagement, and both significantly increased knowledge in core areas of workplace health and wellbeing. In the context of a wider programme of research impact in NHS health and wellbeing, our digital interventions (and published evaluations with 504 users) will be embedded within the trust provision for continuing professional development (CPD) accessible to over 14,600 staff, and will be accessible to all pre-registered healthcare professionals – our ‘next generation’ NHS.

Author/s: Jo Foster and Kirstie Coolin

Title: Inspiring students to be courageous professionals through innovative, immersive digital learning

Abstract: SHS aims to develop student leadership, inspiring them to be courageous, knowledgeable practitioners. The module ‘Politics of Maternity Care’ is a key catalyst in developing their professionalism in midwifery. A co-design approach to module content was student-centred, from timetabling, to digital accessibility and inclusivity. The module merged digital/face-to-face learning environments using a flipped-learning pedagogical model, with 50% online delivery using punchy video lectures plus immersive digital content to scaffold classroom activities. One hugely successful digital resource used to inform intellectual rigor employed recordings of expert clinicians, which was utilised in a live debate with the students. In 149 responses to the e-learning package evaluations, 90% scored resources 7-10 (scale of 1-10), with 37% scoring as 10/10. Evaluation feeds into multiple curriculum areas - progressing best practice and building capacity amongst staff. Furthermore, external moderators commented that students are working at publication level.

Author/s: Dr Nalayini Thambar and Julian Tenney

Title: Digital Futures: equipping ourselves to futureproof our students

Abstract: The transformation of our world through advanced technologies and artificial intelligence means robots are hitting the headlines like never before. How do we prepare our students for their futures, not the world we know? Are we equipped to help them navigate the technologies that will define their lives and shape their future careers? Do we engage with technology to model ways in which our students can use technology, rather than technology use them?

Our students need to be digitally proficient when they graduate and technologically enabled learning will play a key part in their skills development. This session will give you the opportunity to review your own digital capability and confidence, and reflect upon the ways in which you can build on your skills and experience to equip students for their future.

We will set the context by considering current trends and predictions in our technology-enabled world and the future of work where even traditional professions are considered to be under threat (Susskind and Susskind, 2015) as we go through the Fourth Industrial Revolution (Schwab, 2016), and use the JISC Digital Student Experience Tracker to inform your discussion. Our aim is that you leave this session informed, inspired and encouraged to prepare our students for a future that few of us dare to predict.

Author/s: Helen Whitehead

Title: Solving the Puzzle of Participation

Abstract: This session will lead participants through a practical session creating an interactive narrative activity within Moodle for their learners. The activity generated will be based on puzzle- and problem-solving around a specific topic relevant to the participants' teaching. We will be using Moodle features such as multimedia resources, collaborative activities, conditional access and tracking, and open badges. This engaging application of digital learning will build on existing examples of, and literature about, immersive learning, escape games, games for learning and playful learning. It will both engage participants in a practical and fun activity and have them create such an engaging activity for their students. Templates and frameworks will be presented to speed up the production of such game-like activities. The session will use features available in the University of Nottingham Moodle to extend use of Moodle beyond a repository of documents and assignment submission. We would expect participants to work in groups to come up with a near-complete usable activity for a teacher to transfer to their module.