

Education for life: Celebrating partnership, encouraging innovation

Newcastle University Learning and Teaching Conference

21 March 2018

The Boiler House

Abstract Booklet

#ncllt18



Table of Contents

09:40	Keynote: Newcastle University Education Strategy	4
10:30	Strand A. Workshop: CASAP Review.....	5
10:30	Strand B. Presentations: How might we develop students as whole people, preparing them to flourish for futures we can't predict?	6
	Delivering Newcastle degrees in partnership: The challenges and opportunities of delivering joint programmes in Singapore for a sustainable future in SE Asia	6
	The skills of employability – How teamwork and collaboration between students, professional services, professionals and academics has transformed the School of Modern Language’s Employability Agenda	6
	The role of character-led education for the 4th industrial revolution	7
10:30	Strand C. Presentations: How might a research intensive environment add value to the education of all students at all stages?.....	8
	Recommendations for integrating innovative and creative learning approaches within higher education	8
	Using neuroscience research to influence teaching: Could ‘spaced learning’ work in higher education?	8
	Challenges and opportunities from research-informed teaching	9
11:45	Integrated work study programme at Singapore Institute of Technology	10
12:30	Inclusive learning	11
13:15	Posters.....	12
	Poster 1 Developing Shiny web applications to bring research into the classroom.....	12
	Poster 2 Accents of English: Promoting original student research through online dissemination ..	12
	Poster 3 Born Global, Reborn Transnational	13
	Poster 4 Establishing professional learning through student representation.....	13
	Poster 5 Young Marketers 4 the North East	14
	Poster 6 Resilience through the post A-Level transition: developing skills, providing support	15
	Poster 7 Game-enhanced learning in natural sciences teaching.....	15
	Poster 8 Mathematical skills catch-up: Developing a University-wide solution through online formative tests.....	16
	Poster 9 The Researching our Futures Conference about life and careers after the PhD - an innovative and collaborative approach,	16
	Poster 10 Integrating gender in Sustainable Management Education: Embodied experiences and troublesome knowledge	17
	Poster 11 Technology Enhanced Student Micro Teaching	18
	Poster 12 Basic fracture management workshop: A hands-on experience.....	18

Poster 13 Holistic Obstetrics and Gynaecology Mind Maps (HOGMMs) Teaching: Easy to use tool provides equality of learning, teaching and assessment	19
Poster 14 A practitioner's inquiry: Teaching pre-clinical MBBS students using a Question Based Instructional Design with clickers	20
Poster 15 Student Support Services at Newcastle University Medicine Malaysia	21
Poster 16 PGR Training Needs Analysis: joining up training, ePortfolio & personal development planning	21
Poster 17 Expectations, inclusion and assessment: Extended induction workshops for MA (Education): International Perspectives students.....	22
Poster 18 NU Intercoms - Developing Intercultural Competence in the University Community: An action research project	23
14:00 Strand A. Workshop: Reconceptualising and rewarding teaching and teaching excellence in higher education	24
14:00 Strand B Lightning talks.....	25
How can we encourage an educational experience supported and enhanced by technology?	25
Using ePortfolio to record the development of professional behavioural attributes and facilitate reflective practice in Pharmacy	25
Supporting the Student Voice through the MBBS Medical Learning Environment.....	26
Successful use of multiple technologies to reinforce anatomy and physiology theory for first year sport and exercise science undergraduates	26
How might we develop students as whole people, preparing them to flourish for futures we can't predict?	27
Cultivating Resilience through Mindfulness	27
PG Buddies	28
Embedding employability skills into an action learning module	28
How do we adopt and develop approaches to education which actively engage students in their learning?	29
Innovation through collaboration: using blended learning to enhance PGR learning experiences at NCL & NU London	29
Learning and Teaching Sustainability through Marine Engineering Design	30
To flip, or not to flip: that is the question	30
14:00 Strand C. Presentations: How can we encourage an educational experience supported and enhanced by technology?.....	32
VLE Strategic Review: Where we are now and what's next	32
Working Together: The Enhanced Collaborative Capabilities of Microsoft's Office 365.....	32
Developing collaborative critical thinking beyond the classroom	33
15:15 Reflecting on partnership: Articulating the purpose of academic representation at Newcastle University	34
16:00 Keynote: Learning gain.....	35

09:40 **Keynote: Newcastle University Education Strategy**

Prof Suzanne Cholerton, Pro-Vice-Chancellor Learning and Teaching

In September 2016 ULTSEC commenced development of a new University Education Strategy to replace the current Learning, Teaching and Student Experience Strategy. This has involved a wide development and consultation process, which has been aligned with the Vice-Chancellor's work since April 2017, to develop a new University Vision and Strategy to succeed Vision 2021. The intention is that the new Education Strategy will provide a clear reference point for strategic decision making and will be a key driver of educational activity in the University. The main body of the Education Strategy focuses on four key themes – Research-Education links, Student Engagement with their Learning, Holistic Student Development and Technology Enhanced Learning – which have emerged through the extensive consultation. The presentation will consider these four key themes and the potential approaches that might be taken to implementing the Strategy. The session will also take the opportunity to align the Strategy with current changes within the Higher Education Sector and to articulate how the Education Strategy recognises these changes and aims to position Newcastle University such that it can demonstrate to all stakeholders the value and quality of a Newcastle University education.

10:30 Strand A. Workshop: CASAP Review

Chair: Dr Alison Graham, Lecturer, School of Natural and Environmental Sciences

Presenter: Sue Gill, Academic Practice Team Leader, LTDS.

By the time of the conference the CASAP review will have gathered data and be looking for your views on the ideas and suggestions put forward. This interactive workshop will give you the chance to see the ideas collected so far and give us your feedback and further suggestions.

We will consider the content, delivery methods, assessment and feedback, timing, support (central and local) and scope of CASAP and its interactions with other CPD provision.

Come along and have your say.

10:30 Strand B. Presentations: How might we develop students as whole people, preparing them to flourish for futures we can't predict?

Chair: Dr Phil Ansell, Senior Lecturer and Director of Excellence in Learning and Teaching, School of Mathematics, Statistics and Physics

Delivering Newcastle degrees in partnership: The challenges and opportunities of delivering joint programmes in Singapore for a sustainable future in SE Asia

Professor Matt Bentley, Head of Academic Operations, Newcastle University in Singapore

Newcastle University has been delivering degrees in Singapore since 2008 when it began with an MSc Programme in Marine Technology (International). Later, however, Newcastle extended its HE provision by providing two-year undergraduate degrees to Diploma students. These students were graduates of Singapore Institute of Technology. This current academic year, however, marked a new landmark in the partnership with SIT. By then SIT was Singapore's newest autonomous university with its own degree awarding powers. For the first time, in September 2017, undergraduates enrolled on new joint three-year programmes. SIT is Singapore's university of applied learning and aims to be "a leader in innovative learning by integrating learning, industry and community". Newcastle University has "always focused on academic excellence and the impact of our academic work". The first challenge is to arrive at a blend of the two traditions and approaches where the best of each is retained. The second challenge is to establish a set of principles, practices and processes, which ensure the highest quality learning experience. The last and perhaps greatest challenge is to engender a mutual respect and confidence to work together in Singapore, to grow the operation for the benefit of Singaporean students and to be part of SIT's new campus at Punggol from 2021.

The skills of employability – How teamwork and collaboration between students, professional services, professionals and academics has transformed the School of Modern Language's Employability Agenda

Dr JC Penet, Lecturer, School of Modern Languages

Ms Jos Harrison, Careers Advisor, Student and Academic Services

The Learning and Teaching Review of Modern Languages identified the School's approach to employability as a point of exemplary practice identified that would be of value to share with colleagues across the campus. The Learning and Teaching Development Service (LTDS) has therefore invited the School of Modern Languages (SML) to showcase this exemplary practice as it fits very well with the theme of how we develop our students as people. In this 15 minute presentation, the School's Academic Lead for Employability and Enterprise and its Careers Liaison Officer will show how they have gradually embedded employability into the fabric of the School since 2012 and how this has led, more recently, to the creation of the new role of Student Lead for Employability and Enterprise as part of a wider employability strategy for the School that involves students more fully as partners in the School's co-governance. Indeed, the Student Lead sits on the Student-Staff Committee and the Board of

Studies alongside the Academic Lead and they help review and further integrate employability into the School to give every student the chance to develop his or her own employability. This is part of a wider strategy which, with projects such “Translation Networks” or “Born Global, Reborn Transnational” (both ULTSEC funded), aims to make our students engage more fully with employability from stage 1. The aim is for all students to become more aware of all the valuable employability skills they are developing with them (outside the more vocational language skills) and so they can advertise them advertise these to potential employers. SML students involved in such employability projects will be invited to co-present.

The role of character-led education for the 4th industrial revolution

Professor Amanda Broderick, Chief Executive Officer and Director, Newcastle University London

The role of character-led education for the 4th industrial revolution. Generation Z (young people born from the mid-90s) are likely to have jobs that have not even been created yet so how, as Educators, do we ensure that they will have the knowledge and skills that will be needed for industry in the future? – their characters are still forming and their role in the workplace is yet to take shape.

Key messages arising from both business and the UK Commission for Employment & Skills to address the current and growing skills gap focus on:

1. the importance of jumping across specialist knowledge boundaries as technologies and disciplines converge;
2. the development of key skills and competencies that will be at a premium in future, such as resilience, adaptability, resourcefulness, enterprise, problem solving, and the core business skills for project-based employment.

This presentation focuses on current research on industry-led competency frameworks and explores how educators can innovate in partnership with industry to provide urgent solutions to address current and future skills needs.

10:30 Strand C. Presentations: How might a research intensive environment add value to the education of all students at all stages?

Chair: Dr Samantha Shields, Lecturer in Education, School of Education, Communication and Language Sciences

Recommendations for integrating innovative and creative learning approaches within higher education

Dr Iain Keenan, Lecturer, School of Medical Education

It is vital that student learning and satisfaction within the modern environment and context of higher education are optimised. An approach to addressing this is through the use of a variety of cost-effective and appropriate supplementary resources, including innovative creative and artistic methods. Research evidence underpinned by educational theory and theories of drawing indicates that improvements in observation, visualisation, haptic reasoning and visuospatial ability can be enhanced when using artistic learning methods. Such attributes can be important for discipline-specific observational skills in addition to knowledge acquisition and spatial learning. We have previously developed and evaluated our novel artistic Observe-Reflect-Draw-Edit-Repeat (ORDER) approach for anatomy learning in collaboration with student partners and artists. This approach has been designed to be delivered in both practical sessions and online tutorials, and is transferable to other disciplines beyond anatomy and medical education.

Through implementing Artatomy drawing sessions and exhibitions, we have also encouraged a holistic approach to medical student anatomical understanding. We have also welcomed external UK educators to our observational anatomy drawing workshop. In doing so, we have identified several practical tips based on our experiences. Guidance on how to design, develop and deliver effective creative learning methods will be presented. These recommendations will be of value to all educators, and can support those seeking to integrate such approaches into their own practice.

Using neuroscience research to influence teaching: Could 'spaced learning' work in higher education?

Dr Paul Hubbard, Teaching Fellow, School of Medical Education

Neuroeducation is an emerging educational discipline where a neuroscientific understanding of how the brain learns can be used to drive new and innovative methods of teaching and learning. An increasing understanding of the biology behind the process of forming memories has led to the development of learning techniques that aim to tap into the brains' method of forming memories to enhance learning. It has long been known that repeated learning at intervals following an initial learning event aids learning progress. Revisiting a topic shortly after teaching reduces the chances of information being forgotten and increases the possibility of the brain forming long-term memories. Spaced Learning is a technique that hopes to utilise this understanding of memory formation by scheduling multiple short periods of teaching interspersed with breaks where students complete

activities unrelated to the taught topic. Spaced learning was included in the Open University's 2017 'Innovating Pedagogy' report that proposed ten up-and coming innovations in teaching that have the potential to alter educational practice.

This presentation will discuss some of the background neuroscience behind the technique and ask whether this method could be adapted for use in the HE environment.

For further reading please see:

Kelley, P., & Watson, T. (2013). Making long-term memories in minutes: a spaced learning pattern from memory research in education. *Frontiers in Human Neuroscience*, 7, 589. <http://doi.org/10.3389/fnhum.2013.00589>

Challenges and opportunities from research-informed teaching

Dr Cindy Lee, Assistant Professor and Director of Excellence in Learning and Teaching, Newcastle University in Singapore

Research-informed teaching has many benefits for various stakeholders. In my teaching, I have shared my research interest and expertise of supercritical fluids technology with students and colleagues via teaching materials (incorporating into course curriculum), research project supervision (cross disciplinary projects with MDME), final year plant design project supervision and also via sharing on social media (www.thesupercriticals.blog). Research-informed teaching helps students to understand how the principles learnt in their coursework can be linked to actual research and development of innovative processes.

Positive outcomes from the research-informed teaching initiatives include:

1. Collaborations with colleagues from other engineering disciplines were established via co-supervision of final year research projects (E.g. Fabrication and mechanical testing of biomedical foam from supercritical fluid processing).
2. Introduction of Innovative methods and applications related to student's coursework material (E.g. Teaching of supercritical drying, supercritical particle formation, etc.)
3. Increase awareness of our personal research interests and applications.
4. Develop student's ability to research and think of scale-up parameters and methods for non-conventional processes during final year plant design. (2 posters from students' final year projects have been presented in international conferences)
5. Recognition of student's work (Posters on student's work has obtained recognition and positive comments during the conferences)

The challenges in using research-informed teaching is to make the connection between the taught subjects with the research-related activities to provide a good learning experience to the students. Through this presentation, I would like to share my experiences, challenges and approach to research-informed learning.

11:45 Integrated work study programme at Singapore Institute of Technology

Dr Foo Yong Lim, Associate Professor, Assistant Provost (Applied Learning)

Dr May Lim, Associate Professor, Director of Centre for Learning Environment and Assessment Development

Singapore Institute of Technology

Integrated Work Study Programme (IWSP) is a distinctive feature of degree & joint degree (with partner universities) programmes offered by Singapore Institute of Technology (SIT). IWSP will provide students with the opportunity to undertake real work, allowing them to integrate theory and practice and develop deep specialist skills in their chosen field. Students will typically undertake 8 to 12 months of relevant work within the course of their studies. The IWSP is structured in a unique and distinct way for each degree programme to cater to the specific needs of the industry, developing industry-ready graduates. IWSP is compulsory curriculum component, with no exemptions. IWSP will also give students the opportunity to develop professional networks and interpersonal skills. During this period, the students are also immersed in academic learning activities (e.g. reflection reports, innovation projects) that are led by SIT faculty. This ensures full academic rigor as well as an integrated work experience throughout the IWSP period. Real work undertaken through IWSP will also enable the students to understand the challenges faced in the current fast changing economy, and develop skills of adaptability, creativity and innovation, while adding value to the workplace. It is also be the platform through which students will be challenged during their work attachment stint to initiate innovative projects with the guidance of SIT Faculty Supervisors and company appointed Work Supervisors. Through such projects, students will have the opportunity to develop innovative solutions for the projects they have identified.

12:30 Inclusive learning

Dr Ruth Graham, Dean of Undergraduate Studies, Faculty of Humanities and Social Sciences

Sandy Alden, Team Leader, Disability and Specialist Learning, Student Wellbeing Service

The Chair of Student Experience Sub-Committee commissioned a year-long HaSS Faculty focussed working group to explore the current landscape for inclusive learning and teaching at Newcastle University (NU), with a view to proposing further developments in this area in the wake of changes to national policy regarding funding arrangements under the Disabled Students' Allowances. The working group approach involved reviewing developments at NU so far, conducting an audit of existing good practice at Newcastle and at other UK universities and investigation of key issues in more depth with staff and students at NU. Our recommendations represented a mixed bag of short-term actions and longer-term aspirations and the workshop is therefore designed to engage participants in a dialogue about inclusive learning.

The principles of inclusive learning recognise the diversity of the student body, promoting accessible learning and multiple means of access to the curriculum and representation of knowledge. These principles are underpinned by an understanding that students with fuller access to learning opportunities are more likely to engage with learning and reach their full potential, and will require fewer individual adjustments to their learning experience. Consensus based development is needed to meaningfully impact student and staff experience. With this in mind, the inclusive learning workshop invites participants to consider the benefits of using an inclusive approach, consider priorities for further development and embedding of inclusive learning principles in our working practices. We welcome feedback on our proposed inclusive practice checklist, and discussion about how best to maximise use of existing resources at NU.

13:15 Posters

Poster 1 Developing Shiny web applications to bring research into the classroom

Dr Lee Fawcett, Lecturer

Joseph Matthews, Keith Newman and undergraduate student interns

School of Mathematics, Statistics and Physics

This project will develop user-friendly software applications (“apps”) to enable the incorporation of the Project Lead’s research in teaching, outreach and recruitment activities. Within the University, the aim of the project is to enhance the learning and teaching experience through the inclusion of research-led/research-based activities (Healy, 2005) in an advanced Stage 4 undergraduate module in Statistics (MAS8306). Here, the apps will enable students to go beyond lecture material to explore statistical modelling techniques for data on environmental extremes, used in recently-published articles from the Project Lead’s primary research area, without them having to get embroiled in any of the complex mathematics associated with these methods. Indeed, the research-teaching nexus has been the focus of much recent research in Higher Education, and the apps we propose to develop will form only one part of the Project Lead’s efforts to improve students’ engagement, enthusiasm and deep learning by incorporating ideas from his research into classroom activities. Outside the University, the apps will also be used within the Project Lead’s outreach and recruitment sessions (e.g. Royal Institution Master-classes, school visits) to promote the practical application of Mathematics/Statistics and showcase recent research activity within the School of Mathematics & Statistics to a non-technical audience. Under/post-graduate interns will gain valuable computing/coding experience relevant to their degree programmes and curriculum vitas.

Poster 2 Accents of English: Promoting original student research through online dissemination

Dr Danielle Turton, Lecturer, School of English Literature, Language and Linguistics, and undergraduate student helpers recruited from the English Language/Linguistics degree programmes

The aim of the project is to motivate Stage 3 students to create and promote innovative and original research findings in linguistics through an academic blog. This project will run as part of the Stage 3 module SEL3094 Accents of English, where students regularly produce exciting research on accents and dialects which would be of interest to the public. This year, we’ve seen student projects on how Ant & Dec have changed their accents in tandem, how Brits are pronouncing their ‘t’s as ‘d’s in a more “American” way, and how Geordies are judged more harshly for pronouncing think as fink. However, this work is seen by no-one other than the module leader and moderator. By giving students a platform to promote their findings with the general public, the goal of the project is to inspire students to take on more ambitious and experimental research. An additional output to the project will be a “blog launch” at the end of the semester, which will feature a poster session from students.

Overall, the project aims to improve the student experience of the module (and degree programme generally) by recognising and rewarding students for innovative work.

Students will have direct and continued impact in creating and maintaining the blog. The project will strengthen the link between teaching and research, not just through lecturer input, but also through students identifying the legitimacy of work they have created themselves.

The project will improve the student experience by giving students the chance to promote their own research, something usually reserved for postgraduate level. By encouraging students to convert their academic writing into more media friendly language, they will learn skills important for their future careers. They will learn how effective data visualisation can help tell a story about their findings in an accessible and exciting way.

The blog will be promoted to Stage 2 students in their dissertation seminars, serving as a point of inspiration for possible research projects they can carry out at undergraduate level.

Poster 3 Born Global, Reborn Transnational

Dr JC Penet, Lecturer, School of Modern Languages

In 2016, the British Academy made publicly available on its website all the findings of the “Born Global Project” (<http://www.britac.ac.uk/born-global>) so it could be used “by a range of stakeholders and inform [...] future developments in Higher Education language curricula and assessment” (About Born Global, p.3). This ambitious and unprecedented study “set out to develop a deeper understanding of the language needs for employment, employer attitudes to languages and how languages are used in the workplace for different purposes” (ibid).

The SML wants to trial a new partnership between its students and its L&T Committee in order to embed the key findings of the study into its Employability Strategy. Students will be asked to familiarise themselves with “Born Global” and consider what the findings mean for them as SML students and how they could be best feed into our Employability Strategy to further develop their understanding of themselves as ‘transnational’ (and what this means for employers). This represents an opportunity to further develop the concept of co-governance (students as partners) for employability / L&T in SML and beyond – it will be a model of good practice for other Schools in NU and for other languages units nationally.

Poster 4 Establishing professional learning through student representation

Dr Luisa Wakeling, Lecturer, School of Dental Sciences

Matthew Harper, Undergraduate Student, School of Dental Sciences

Miranda Trevor, Undergraduate Student, School of Medical Education

Dr Joe Barton (Newcastle University Student Union)

General Dental Council (GDC) sets professional standards for dentists and governs undergraduate programmes of Dental Sciences. Many of the skills defined by these standards are difficult to incorporate within the core curriculum (e.g. dealing with complaints, raising concern, effective management and leadership), but are developed through involvement in the Academic Representation System. The aim of this work is to explore and establish professional learning opportunities for Dental Sciences students facilitated by participation in Academic Representation.

An initial focus group with students who occupy key positions in the Representation System, analysed by thematic analysis, identified three major themes: Personal Skills, Experiences and Opportunity. Across all themes, there was a clear gap with respect to training needs, with students acknowledging some training was irrelevant and they 'relied on shadowing' their predecessors for some knowledge and skills.

Based on the need for further exploration, two student interns (one Medical and one Dental student) have established two lines of inquiry: Student Representation Process and Practice; and Professional Skills and Recognition. So far, additions have been made to the Dental Sciences reflective e-Portfolio, iDentity, to allow students to record student representation activities.

Future work aims to identify areas of targeted training that could be developed into workshops, providing a framework to develop an award such as an ncl+ Advanced award or alternative. If successful, this will be made available to all students involved in representation. This will also be the first scoping exercise with students since 2013 to discuss the learning outcomes of student representation and so we also intend to provide evidence of skills attained that can be used to further inform NUSU Rep training.

The Academic Representation System has the potential to facilitate and enhance learning relevant to professional practice. Further investigation into the needs and development of relevant training is warranted with a goal to allow students to evidence skills and experiences attained, in alignment with professional standards, to strengthen their development into prominent careers.

Poster 5 Young Marketers 4 the North East

Dr Elena Chatzopoulou, Lecturer, Newcastle University Business School (NUBS)

During the "Young Marketers 4 the North East" NUBS project 100 students created advertisements for SMEs which were founded by alumni of our University. Advertisements had to rely on Marketing theories and techniques which students were taught in their Programmes and to be in accordance with the Companies' advertisement briefs.

As a result, the "Young Marketers 4 the North East" project supported the students' professional development and improved their employability prospects, by making it possible to apply marketing theories taught in class to real projects. It also helped the local community and in particular, local SMEs businesses who do not have in-house marketing and communications teams. Finally, the project offered a creative way for the School to engage with local businesses and potentially develop a more in-depth and wider relationship with them.

Poster 6 Resilience through the post A-Level transition: developing skills, providing support

Dr Amy Fielden, Teaching Fellow

Dr Helen St-Clair Thompson, Senior Lecturer

Tascha Clapperton, Demonstrator and Postgraduate Researcher

George Newstead, Student Intern

Bethany Suggett, Student Intern

School of Psychology

This poster will detail progress of an ULTSEC Innovation funded project to support A-Level students studying STEM subjects in their progression to University. In particular, the project seeks to not only develop University level study skills but to foster resilience and problem solving skills in students from predominantly widening participation (WP) backgrounds. Student interns have worked alongside the project team to develop a programme of sessions that facilitate the development of important skills such as critical thinking, reading efficiently and synthesising information from scientific articles. Embedded within these sessions are opportunities for students to reflect on their learning and attainment in the broader context of their future aspirations and also to develop skills, and learn methods to better cope with stressful situations, and respond constructively to failure or disappointing results. The poster will incorporate information that we are collecting from 6th form and college teaching staff, A-Level students and current stage 1 students about the transition to university in relation to skill development and resilience. Finally the poster will set out ideas for further session development, future project plans and reflections on the expectations and realities of the transition to university.

Poster 7 Game-enhanced learning in natural sciences teaching

Dr Alison Graham, Lecturer

Dr Sara Marsham, Senior Lecturer

School of Natural and Environmental Sciences

This project intends to introduce game-enhanced learning to areas of natural science teaching. For the purposes of this project, game-enhanced learning includes activities that are easily recognised as games (e.g. board games, card games) as well as those that use the principles of game design in a non-game context (also called “gamification”; Robson et al. 2015). This includes “escape room-style” activities and puzzles but excludes digital/electronic games.

Game-enhanced learning is increasing in university teaching and popular culture as a method of increasing engagement (e.g. Bassford et al. 2016; McGonigal 2012; Naik 2017) but, to the best of our knowledge, has not yet been trialled in natural sciences teaching at Newcastle. Current students have identified components of their courses that they find tricky to grasp (some examples include calculations (e.g. scale bar, colony count, molarity),

accurate pipetting of microlitre volumes, calibration curves, some areas of statistics). We will focus initially on subject content but there is also scope to consider the teaching of more transferable skills through game-enhanced learning (e.g. referencing format).

We plan to recruit a team of student interns to accomplish two tasks:

1. A comprehensive review on the use of game-enhanced learning in the scientific disciplines. This will include appraisal of good practice in game-enhanced learning in this University and beyond.
2. The team will build on their knowledge of current good practice to devise game-based activities for current teaching within the School of Natural and Environmental Sciences. These activities will be trialled with undergraduate volunteers in small-scale feedback groups (this may involve several iterations). After further development as necessary, the activities will be trialled in modules, initially in low-stakes situations, with a view to increasing their use in teaching in 2018-19.

References: Bassford et al. (2016) *Research in Learning Technology* 24:30089; McGonigal (2012) *Reality is broken*; Naik (2017) *Innovations in Education and Teaching International* 54:238; Robson et al. (2015) *Business Horizons* 58:411.

If anyone is interested in collaborating with us or would like to know more about the project, please contact us on nugel@ncl.ac.uk or follow us on Twitter @GELNewcastle

Poster 8 Mathematical skills catch-up: Developing a University-wide solution through online formative tests

Dr Chris Graham, Director of E-Learning, School of Mathematics and Statistics

Many subjects across the University are challenged by students who struggle with an unexpectedly high level of assumed mathematical proficiency in their courses. This project has built a significant bank of formative mathematical tests using the Numbas e-assessment tool, which can be used both as a diagnostic tool and for student-led learning.

Through Blackboard, academic staff across the University are now able to easily add (or customise) pre-packaged material into their course. In addition the material is made available to students through the Academic Skills Kit (ASK) website and is being used to facilitate outreach activity.

Poster 9 The Researching our Futures Conference about life and careers after the PhD - an innovative and collaborative approach,

Prof Helen Berry Dean of Postgraduate Studies, Faculty of Humanities and Social Sciences

Fiona Hartley, Careers Adviser, Careers Service

Jane Nolan MBE, Lecturer, School of Arts and Cultures

Cristina Peligra, Postgraduate Research Student, School of Modern Languages

The new Researching our Futures Conference was designed by students for students and set out to offer the HaSS Faculty's postgraduate and early career researcher community the chance to think about life after the PhD. A 2010 Vitae report (What do researchers do?) noted that less than 22% of PGR students will find employment in academia.

Researching our Futures brought together PhD graduates working in a wide range of careers, within the academy and beyond it, who spoke about their diverse career paths and the value of their skills, inviting delegates to explore future career possibilities, discover the breadth of opportunities available and consider their choices.

Crucial to the success of the event was the partnership formed between the student committee, the academic team within the HaSS faculty and the Careers Service, who helped to identify possible speakers and offered administrative direction.

The project was funded by the HaSS Faculty and through a successful bid to the PGR Innovation fund. This innovative event was attended by 100 delegates and hosted 26 speakers and keynote contributors. Delegates have clearly indicated through their feedback and evaluation that the event had opened up their thinking about potential career options, with 62% of respondents reporting that their views on career possibilities had changed; the conference had enabled 'different thinking about careers.' A full report has been produced to provide data to inform any further projects and video and audio resources have been created for current and future students.

Poster 10 Integrating gender in Sustainable Management Education: Embodied experiences and troublesome knowledge

Dr Elina Meliou, Lecturer, Newcastle University London

Sustainability education encompasses three major dimensions: economic, social, and environmental (UNESCO, 2008).

Scholars have highlighted the importance of underlying the different interpretations of sustainability in the context of business to avoid educational disconnect and emphasize an educational 'worldview' that defines the curriculum. Within this context recent studies have turned attention to the social pillar of sustainability highlighting how issues of deprivation, social exclusion, and gender affect organizations' survival emphasizing the social responsibilities of managers, and those who educate them. Gender is recognized as a fundamental component of social order with material and ideational effects, yet is poorly integrated in Sustainable Management Education. Teaching gender within management education remains a challenge because it demonstrates the problematic nature of the dominant perception, which maintains management theory and practice is gender neutral. This qualitative study argues gender is a threshold concept for responsible management, providing students with insights into social inequalities and developing an understanding of how social categorizations marginalize and restrict opportunities for some people in the workplace. Through an investigation of the experiences of first year undergraduate business management students and their educators, the study demonstrates how gender becomes troublesome (and therefore potentially transformative) knowledge through students embodied understanding and experiences of emotion, bodily differences, preferable bodies and bodily violation.

Poster 11 Technology Enhanced Student Micro Teaching

Tracy Connell, eLearning Coordinator, Faculty of Medical Sciences Graduate School

A valuable part of one of our face to face modules is the micro teach activity where students teach for 5 minutes or 15 minutes to a group of their peers and then receive feedback on that teaching. We did not want to exclude it from our distance learning version of the same module as the students loved it and got so much valuable feedback.

So, after looking at many available applications and methods, we decided to survey students. The results showed they used a range of devices, had mostly no experience uploading video to the internet and they suggested the use of video or skype for a distance learning micro teach.

We decided that the solution with the smallest learning curve for the students would be to let them record the video on their own device (whatever that may be) but provide a secure and easy solution with guidance, to upload their videos using Panopto. Skype or a live classroom would have its own issues in needing groups of students to be available at exactly the same time. We tested the solution with volunteers and then tested it in a pilot with 10 students. The pilot ran very smoothly and we rolled out to a full cohort the following year.

For the future we plan to organise students into group folders in Panopto and improve the system of feedback from peers which involved students filling in a Proforma in Microsoft Word.

Poster 12 Basic fracture management workshop: A hands-on experience

Dr Amit Bhardwaj, Senior Lecturer

Dr Michaela Goodson, Dean of Research

Newcastle University Medicine Malaysia

Background:

A basic fracture fixing principles was conducted as workshop facilitating hands-on experience with holding orthopaedics instruments, drill, tap, screw placement, dynamic compression plate, dynamic hip screw and intramedullary nailing on saw bone.

Objective:

To introduce a hands-on experience of basic fracture management as a teaching aid, and to provide preliminary evidence of its effectiveness in teaching stage 3 and stage 5.

Workshop:

A short didactic video presentation outlining the basic principles in fracture management was initially presented followed by hands -on experience. The students completed pre- and post MCQ assessment on instruments, principles of management of fractures. Feedback was taken on the perception of effectiveness of the workshop.

A total of 34 students participated in the workshop. Statistically significant improvement in the scores observed with the percentage of correct responses in stage 3 pretest was 60 % and post-test 88%. The stage 5 students scored 72% in pretest and 96% post test questions. All the students rated high on all aspects of the workshop and there is no statistically significant difference in the rating between the stage 3 and 5 students. The students were highly appreciative of the exposure of various instruments used in fracture management and the hands-on experience.

Conclusions:

Basic Fracture management skills workshop is a promising teaching aid providing hands on experience to students in these technical skills that can improve the confidence in handling the instruments in future workplace as house officers /residents in orthopaedics.

Poster 13 Holistic Obstetrics and Gynaecology Mind Maps (HOGMMs) Teaching: Easy to use tool provides equality of learning, teaching and assessment

Dr Hassan Karali, Senior Lecturer, Newcastle University Medicine Malaysia

Background:

Literature supports the benefits of Mind Maps as teaching tools and it reduces or eliminates the bias in students' assessment. Many mind maps in OBS & GYN teaching and learning were directed to certain conditions or specific section of the subject discussion, unlike our HOGMMs which is designed to aid in achieving diagnosis by obtaining history, examination, investigations, and management of any case in OBS & GYN.

Aims:

Evaluate the perceived learning benefits of HOGMMs for acquiring a range of clinical skills and standardising assessment and teaching methods.

Methodology:

Holistic OBS & GYN Mind Maps (HOGMMs) were developed by Hassan Karali in Sept.-Dec. 2015 and given to stage 3 NUmEd students (n=113) for 6 months (Jan. 2016-July 2016) as a tool to assist their learning during their Women's health rotation. After the completion of their rotation, they were invited to complete a questionnaire assessing perceived benefits for skill acquisition and standardising assessment and teaching methods. Pilot study was conducted.

Results & Discussion:

Most students believed HOGMMs was a useful learning tool across a range of parameters (max = 96%; min = 59%). Students who believed HOGMMs is useful for standardising assessment and standardising teaching methods ($\chi^2=35.836$; $p=0.0005$) & ($\chi^2=20.256$; $p=0.0005$) respectively.

Conclusions:

This study suggests that students value our HOGMM's not only for developing clinical skills but also standardising assessment and teaching methods. Further work is currently

underway to investigate if a tutorial session on case presentation and writing can enhance the value of HOGMMs.

Poster 14 A practitioner's inquiry: Teaching pre-clinical MBBS students using a Question Based Instructional Design with clickers

Dr Jhoram Nufable, Senior Lecturer

Dr Sarah Nufable, Senior Lecturer

Dr Richard Price, Degree Programme Director

Dr Clare Guilding, Dean of Academic Affairs

Newcastle University Medicine Malaysia

Background:

The use of clickers has become a common practice amongst lecturers in recent years due to a drive towards increased interactivity. This practitioner's inquiry is to investigate how the use of 'Question Based Instructional Design (QBID) in lectures influences development of knowledge to improve the author's teaching practice in the early years of medical school.

Design:

A qualitative research approach was taken. Twelve MBBS students from pre-clinical years were invited to participate in a focus group discussion which was audio-recorded and transcribed. Thematic analysis was done where relevant themes to the inquiry questions were identified. The practitioner's personal reflection on the use of QBID and relevant themes from the focus group were matched to reveal concordant themes to answer the inquiry questions. These themes were subsequently used to come to an understanding of the inquiry questions and inform the practitioner's teaching practice.

Findings:

QBID may foster critical thinking and perhaps help students shift to self-directed learning. Students' passivity is minimized as it may offer a safer environment for learning. However, it might also impair the development of knowledge as it may be time consuming and may lead to less time for concept elaboration.

Conclusion:

QBID may positively influence development of knowledge and enhance the practitioner's ability to help students develop knowledge. However, lesson plan preparation with relevant questions that would encourage critical thinking, peer to peer and teacher to student collaboration and integration with prior concepts can be challenging.

Poster 15 Student Support Services at Newcastle University Medicine Malaysia

Dr Ma Brenda Pancho, Associate Professor, Assistant Dean for Student Support

Newcastle University Medicine Malaysia

An audit of Student Support Services at Newcastle University Medicine Malaysia was conducted for AY 2015-2016 to determine the distribution of students seen by the service, the types of problems affecting these students and the types of support provided, and to make recommendations to improve service provision. Sources of data were the Student Administration System, Student Support Team meeting documents and English language support reports.

Descriptive statistics were used to determine the distribution of students, types of problems and types of support provided. Student support services were provided to 26% of MBBS and 7% of BMS students. A higher percentage of female students were seen compared to male students (28% vs. 20%). Academic issues were the most prevalent (63%) among students seen, followed by problems related to stress and coping, relationships and mental health. Compared to pre-clinical students, a higher percentage of MBBS clinical students received pastoral support (15% vs. 10%), while a lower percentage received study skills support (8% vs. 22%). Out of 19 students referred for Occupational Health Assessment, 58% were MBBS Stage 3 students; 63% were referred for mental health problems.

English language support was provided to 32% of students. Recommendations include 1) continuing pastoral support, monitoring of academic performance and study skills support if needed for students with mental health problems, those with multiple problems, and those referred for OHA; 2) monitoring of academic performance and study skills support for students with academic difficulties; and 3) disseminating findings to and encouraging early referral by personal tutors.

Poster 16 PGR Training Needs Analysis: joining up training, ePortfolio & personal development planning

Mr Simon Cotterill, L&T Projects and Innovation Manager, Faculty of Medical Sciences

Dr Richy Hetherington, Postgraduate Skills Development Co-ordinator, FMS Graduate School

Dr Gail De Blaquiere, Lecturer, SAgE Faculty Office

Dr Laura Leonardo, Lecturer in Postgraduate Skills Development, HaSS Faculty Office

Dr Robin Humphrey, HaSS Faculty Office

Will Emmerson, Learning Technology Support Unit, Faculty of Medical Sciences

A new Training Needs Analysis (TNA) and Personal Development Plan (PDP) for postgraduate research (PGR) students was implemented in ePortfolio for September 2017. TNA is complex; training needs vary by person, discipline, stage, and there are tensions

between short-term project requirements and longer-term transferable skills development. Most PGRs are unfamiliar with formal TNA/PDP.

The TNA includes 3 sections: a) integrated tutorial, b) review of skills, and c) PDP.

The review of skills is structured around the 12 high-level sub-domains of the national Researcher Development Framework (RDF). Training is already classified by RDF by PGR training programmes and eBooking system. For each RDF sub-domain, students can view 1) a description of the 'skill', 2) their blog entries related to that skill, 3) workshops attended, 4) relevant training opportunities, 5) browse and select 'suggested objectives' recommended for particular stages, 6) add a summary of evidence for the skill. Students can then add their own objectives to the PDP, in addition to any 'suggested objectives' selected earlier. The PDP includes facilities to record progress and lessons learned; it can be downloaded as a PDF for discussing with supervisors and used as evidence for Annual Progression.

Between October and December 2017, 110 individuals had set 738 objectives (60% suggested objectives, 40% personally specified). Further interim analysis and feedback is discussed. The TNA/PDP integrates closely with training programmes, ePortfolio & eBooking systems. The approach could be readily applied to other skills frameworks.

Poster 17 Expectations, inclusion and assessment: Extended induction workshops for MA (Education): International Perspectives students

Noelia Cacheiro Quintas, Teaching Fellow in Spanish, School of Modern Languages

Rene Koglbauer, Executive Director of North Leadership Centre, School of Education, Communication and Language Sciences

This study presents the results of a response to academic, social and cultural issues which emerged over the 2015/16 academic year within the MA in International Perspective. It consisted of an extended induction for students on the MA on the first year, and on the education programs on the second year. This three-year study in its second year, will be completed in the coming academic year 2018/19.

The extended program consisted of four workshops focusing on several academic, social and cultural aspects of student's experiences. Those workshops are: Expectations – relationships with academic staff and reading and writing critically, Support for writing – what do students need? What does support look like? How much can you expect? When?, Feedback – What is it? How should you receive it?, and, Academic Writing – quality of English, referencing, and where to get help. It aims at piloting a sustainable response to the academic, social and cultural issues which are constantly emerging in our globalized and multicultural body of students. Issues with the potential to block the development of our Higher Education Institutions policies' on internationalization and diversity, and decelerate student's progress towards their personal best.

Poster 18 NU Intercoms - Developing Intercultural Competence in the University Community: An action research project

Dr Patrick Rosenkranz, Senior Lecturer, School of Psychology

Dr JC Penet, Lecturer, School of Modern Languages

Sarah Graham, Deputy Director, Combined Honours

With campuses overseas, students from 120 different countries and staff from over 80 countries, we are a truly international institution that aims to “enable our students and staff to gain international experience.” (Internationalisation Strategy).

This project will support the University’s commitment to “offer opportunities to all our staff to enhance their cross-cultural understanding” by concretely “embedding an international dimension into our practice” Using the latest research in intercultural communication, we will create an active space to work with our home and international staff/students that will enhance everyone’s intercultural competence and deliver an inclusive learning experience.

14:00 Strand A. Workshop: Reconceptualising and rewarding teaching and teaching excellence in higher education

Chair: Professor Danny McLaughlin

Presenter: Professor Stephen McHanwell, Director of Unit for Educational Research Development and Practice, School of Medical Education

New public management and neoliberalism have been powerful political drivers of a quality culture in HE institutions. In the UK this has impacted upon research through the research excellence framework which, in turn, has impacted upon teaching through further increasing the imbalance in the ways in which teaching is rewarded when compared with research. This imbalance was extensively investigated in the UK in reports for the HEA produced by Cashmore (2009a and b). Since the appearance of those reports progress in rewarding teaching has been made across the sector, not least in Newcastle. Nevertheless more recent reports by Cashmore (2013), and Fung and Gordon (2016) on sector-wide progress in this area clearly shows that there is still work to be done especially in recognition for promotion on grounds of teaching to the higher grades of Reader and Chair. Blackmore (2016) in a recent HEPI paper argues this is largely due to the operation of a prestige culture in universities. At the same time teaching excellence remains a contested concept while the performativity culture has profoundly affected teaching through its focus on instrumental measures of direct student engagement such as student satisfaction ignoring the complex and multifaceted role that teaching involves. This session will discuss some of the recent work and current conceptualisations in teaching excellence and its reward that have emerged in the last five years and present some of the work currently in progress in Newcastle.

14:00 Strand B Lightning talks

Chair: Dr Laura Delgaty, Deputy Degree Programme Director, School of Medical Education

How can we encourage an educational experience supported and enhanced by technology?

Using ePortfolio to record the development of professional behavioural attributes and facilitate reflective practice in Pharmacy

Dr Hamde Nazar, Senior Lecturer, School of Pharmacy

Simon Cotterill, L&T Projects and Innovation Manager, Faculty of Medical Sciences

Background:

Health Education England have developed a professional attributes framework (PAF) that describes the required behavioural indicators of a pre-registration pharmacist. This framework informs recruitment and selection for pre-registration training posts, which undergraduate MPharm students apply for during Stage 3.

Aims:

The University ePortfolio was configured to embed the PAF behavioural indicators as a skills framework. Additional programme-level customisation (through 'My Learning') included defining blog categories with guidance on course requirements. Students received sessions on the purpose of the ePortfolio to facilitate professional development in preparation for application to the pre-registration programme. This included guidance on recording blog entries and the evidencing of skills and behaviours. Academic staff have been asked to regularly review entries, provide feedback on the demonstration of the behavioural indicators, and encourage further reflection to enrich potential learning.

Early results:

Students across the MPharm programme are engaged with the ePortfolio; there were 584 blog entries Oct-Dec 2018 by 149 students (58% of total). Academic staff have so far made 159 comments (27% of total blogs). Further student and staff evaluation will be presented. There is a risk a lack of academic presence could detrimentally impact student experience and potential benefit from this activity.

Conclusion:

MPharm students are engaging with the ePortfolio with the use of blog entries and evidencing professional behavioural development. Students require academic guidance and feedback in order to develop the skills to reflect and evidence effectively.

Supporting the Student Voice through the MBBS Medical Learning Environment

Dr David Kennedy, Deputy Head of School, School of Medical Education

John Moss, Faculty Learning Technology Systems Manager, Medical Sciences Faculty Office

Feedback from our students is vital to ensure we provide high quality education and student experience. Evaluation, student representation and student-staff committees have an important role in getting the students' voice heard.

To be effective, students need to feel confident in providing feedback and understand that their feedback is taken seriously and what is being done to address the issues raised. Good communication is therefore vital in ensuring issues are raised and the outcomes of discussions are fed back to the student body.

We have developed an area within the Medical Learning Environment (MLE) dedicated to supporting the student voice. Through this area, students are able to directly contact the academic year lead, their group representative, Student-Staff Committee Chair(s) and their School representative. They are able to view and suggest items for upcoming Student-Staff Committee agenda's, minutes and action plans from previous meetings, evaluation data and summaries and action plans based on evaluation from course leads.

Course representatives have the same functionality, but are also able to contact the group of students they represent to seek views and feedback on any discussions/outcomes and disseminate information. Student-Staff Committee Chairs, who are also group representatives, have the additional functionality of being able to communicate with the course representatives.

The system was introduced during Semester 1 of Year 1 in 2017-18. To date, there have been over 6000 recipients of emails sent through the student voice area on the MLE.

Successful use of multiple technologies to reinforce anatomy and physiology theory for first year sport and exercise science undergraduates

Dr Chris Eggett, Senior Lecturer, School of Biomedical Sciences

Practical, real world scenarios can be a stimulating and engaging way to reinforce classroom teaching. Cardiovascular knowledge is key for first year sports and exercise students with specific reference to physiological concepts relevant to exercise such as stroke volume and cardiac output.

These aspects were revisited during a novel lab session in which small groups of students observed a human heart at rest and under exercise conditions during an ultrasound study. Students were provided with interactive workbooks including tasks such as diagram labelling and data tables to complete.

Multiple software packages were used, including simulator software (Heartworks) to explain in 3D how ultrasound images are acquired. Live scanning of a human subject was projected from the ultrasound machine and the ADI PowerLab system was used to record a real-time

electrocardiogram (ECG) signal displayed on a large monitor using LabTutor software. Live on screen measurement of the heart chamber volumes was performed prior to exercise.

Repeat scanning performed at peak exercise visually demonstrated the impact of how hard the heart works during exercise and allowed for further measurements from which students calculated the stroke volume and cardiac output during exercise. All 69 students provided evaluation demonstrating 100% agreement that the session helped promote reinforcement of the cardiovascular lecture material; 97% agreement that ultrasound imaging of a human effectively demonstrated anatomy & physiology and 87% reported use of this technology stimulated interest in cardiovascular physiology.

Quality technology based teaching is resource heavy and requires a committed team to ensure effective delivery.

How might we develop students as whole people, preparing them to flourish for futures we can't predict?

Cultivating Resilience through Mindfulness

Michael Atkinson, Teaching Fellow, School of Medical Education

Dr Richy Hetherington, Postgraduate Skills Development Co-ordinator, FMS Graduate School

Students in HE under increasing levels of stress (Dijk, 2015; GMC, 2013; Stallman, 2010). Poor mental health is commonplace amongst the student population (Aronin, 2016; Billingsley, 2015), with studies showing for example, that 1 in 4 students in HE report experiencing some form of mental ill-health.

Similarly, researchers experience a range of highs and lows of when carrying out their work, often resulting in diminished well-being and high levels of stress (Hayton, 2015). Relationships with supervisors, the effects of critical feedback, and deadlines, can all contribute to such stress increases (Fielden, 2016).

Studies show that resilience is a vital component of well-being, mental health and the academic performance of students in HE (Hartley, 2012; Vitae 2010; de Vibe, 2016). It is vital that we find ways to help students to manage stress, build resilience and cultivate well-being in ways that are sustainable and meaningful. To do so would be to help them to navigate and succeed in their studies, and prepare them for professional life.

Research suggests that mindfulness-based interventions (MBI) might be one way in which resilience can be cultivated. A recent randomised control trial study with university students, for example, found that an 8-week mindfulness course did increase the participants' sense of resilience and well-being, particularly around exam periods (Galante et al, 2017).

This workshop will introduce participants to mindfulness meditation, and will include the opportunity for some meditation practice, along with discussion on how this can help promote the well-being and resilience of our students.

PG Buddies

Joey Jenkins, Postgraduate Research Student

Dr Heike Pichler, Senior Lecturer

Jasmine Warburton, Postgraduate Research Student

Kaleigh Woolford, Postgraduate Research Student

School of English Literature, Language and Linguistics

PG induction events run by academic staff typically focus on supporting students' academic and professional transition into PG studies. The social and personal aspects of the transition tend to be overlooked, however, despite reports that they are a primary source of student anxiety (Thomas 2012). In order to enhance PG students' transitional support, the School of English Literature, Language and Linguistics launched the PG Buddy Scheme in 2017-18. In this presentation, we will outline the key aims and activities of the scheme, and report on participating students' experience of the scheme.

The primary aims of the PG Buddy Scheme were as follows: (i) to support both home and international students in the transition to PG studies and a new academic culture; and (ii) to build a strong social and academic cohort identity that crosses disciplinary boundaries. The Buddies were PGR students who had completed their Masters at Newcastle. They organised social events for new PG students which involved current PG students. These events provided a structured time for peer interaction (see West 2011) and supported the development of a community of PG students across different stages of PG study and across different disciplines (see Conrad et al. 1998). Participating students welcomed the opportunity to receive practical advice about resources, hear about current students' experiences of their programmes, and meet fellow students in an informal context. They reported in feedback that the scheme helped address their pre-arrival anxieties, prevent post-arrival isolation, and facilitate a lasting sense of PG community.

Embedding employability skills into an action learning module

Dr Sharron Kuznesof, Senior Lecturer, School of Natural and Environmental Sciences

Dr Helen Mason, Teaching Fellow, School of Biomedical Sciences

This research reports on a ULTSEC funded project to embed employability skills into a new cross-faculty and interdisciplinary action learning module ACE2073 New Food Product Development (NPD). The project outcome is to enhance the skills profile of students seeking employment in new product development roles.

Essential and desirable skills relevant to NPD were identified from industry and practitioner sources. These were used as elicitation materials in n=3 focus groups with final year undergraduates who had spent at least 9 months in a food-related industry placement. The group discussions explored students' knowledge and understanding of employability skills, skills preparedness for placement, and skills development within the curriculum.

An underlying theme in the discussions was to make employability skills personally relevant through their identification, communication and practical application within the curriculum. Ten key skills relevant to NPD (including attention to detail, team working, creativity, problem-solving, adaptability, initiative and commercial awareness) were identified. To embed the personal relevance of employability skills into ACE2073, we will:

- Compare students' perceived confidence associated with the ten employability skills pre- and post-module completion.
- Signpost skills development associated with each workshop within the module.
- Incorporate Careers Advisory Service workshops into ACE2073 as compulsory components rather than extra-curricular.
- Require students to complete a summative personal reflection on skills assessment.

Follow-up research includes examining the perceived usefulness of skills development with graduates employed in the food industry.

How do we adopt and develop approaches to education which actively engage students in their learning?

Innovation through collaboration: using blended learning to enhance PGR learning experiences at NCL & NU London

Rosalind Beaumont, Lecturer in Postgraduate Skills and eLearning Development, HaSS Faculty Office

Adam Potts, Teaching Fellow, Philosophical Studies

Nuala Davis, Development Officer, Learning and Teaching Development Service

Abstract: To meet the needs of an increasingly diverse student body and to look ahead to future needs, a project began in April 2017 to deliver a blended version of "The Nature of Enquiry and Explanation", a foundational module in HaSS PG Certificate in Research Methods.

Our aims were to

- provide support for those students new to the subject area or to UK HE
- develop online resources to enable deeper understanding of the subject materials
- better prepare students to engage with the module's seminars
- pilot the delivery of the module remotely to PGR students in NULondon

The module was successfully delivered to over 150 students in Semester 1 2017-18 through the development of effective collaborations between academic & professional services staff at NCL, NULondon, and our Teaching Assistants.

Following the redesign & subsequent delivery of the NEE module in Semester 1, and encouraging anecdotal feedback, the core development team are undertaking a more formal evaluation which includes considering students views on their learning experience

and also the module's assessment outcomes. This will be achieved by reviewing the EVASYS data, running student focus groups, and review assessment data.

We will present the initial outcomes of the evaluation, our perspectives on the value of our collaborative approach, and provide interim learning points based on our experiences of the redesign & delivery of a module in blended mode.

Learning and Teaching Sustainability through Marine Engineering Design

Dr Ivan Tam, Director of Operations and Associate Professor in Marine Engineering Design & Technology, Newcastle University in Singapore

A new engineering design project coursework is introduced to marine engineering students at the Singapore campus. Waste heat energy from the main engine is normally recovered to produce steam, heating and fresh water generation. The turbocharger is also used to improve overall thermal efficiency with waste heat. The coursework, however, teaches students to design an engineering plant in generating cooling effect through the absorption refrigeration cycle with the use of this waste heat. Students have to integrate the scientific principle of absorption refrigeration and diesel engine cycles of two isolated engineering topics through a coursework of Marine Engineering Design (MAR3133). They are grouped and tasked to retrofit the central cooling system of the main engine to produce refrigeration and cooling on board ship. Students will learn and appreciate the significance of energy conservation and sustainability through retrofitting marine engineering system. The holistic view of energy management and the concept of sustainability is expected to have an impact towards an engineering student and the environment in the long run.

References:

Agnew B, Walker S, Ng B, Tam ICK. Finite Time Analysis of a Tri-Generation Cycle. *Energies* 2015, 8(6), 6215-6229.

Chin C, Tam I. Online Rubric Assessment Tool for Marine Engineering Course. In: International Conference on Learning and Community Enrichment (ICOLACE 2012). 2012, Singapore, Asia.

To flip, or not to flip: that is the question

Dr Javier Munguia, Lecturer, School of Engineering

Dr Joan Harvey, Senior Lecturer, School of Psychology/ School of Engineering

The concept of 'Flipped teaching/ flipped classrooms' has been around for some years now, and is based on the principle of reorganizing teaching so that time-consuming superficial knowledge is acquired outside class-hours via web/multimedia channels, while deep-hands on learning takes place at class.

We decided to adopt Flipped teaching for our MEC8028- Design for Human Systems postgraduate course, (Mechanical engineering) and this decision took us through a journey not normally seen for standard lecture styles: from choosing and finding flat-interactive

teaching spaces to preparing guide template materials, marking formats and demonstration strategies.

A direct result of this approach is the need to provide feedback within shorter margins for the activities to have real impact as well as the need to reassess the overall weighting of the flipped class dynamics as these tend to be group-based activities.

While the informal feedback we have gathered in the past 2 years since the 'flipped' model was adopted has been broadly positive, we are now in the process of assessing the real impact of this change reflected in Evasys results.

14:00 Strand C. Presentations: How can we encourage an educational experience supported and enhanced by technology?

Chair: Dr Floor Christie-de Jong, Lecturer, Faculty of Medical Sciences Graduate School

VLE Strategic Review: Where we are now and what's next

Professor T.T. Arvind, Professor, Newcastle Law School

Lisa Fishburn, Development Officer, Learning and Teaching Development Service

The Virtual Learning Environment (VLE) is one of the most important systems at the University to support learning and teaching. It is essential that the University has a system that encourages staff and students to take full advantage of its functionality and that supports the ambitions of the University to offer a range of delivery methods, including blended learning and fully online programmes.

Chaired by Professor Simon Pallett, a Task and Finish Group is leading a three year project to review the University's current VLE provision (Blackboard and the MLE) with the ultimate goal to procure and implement a new system from August 2020 when the current Blackboard licence expires.

The consultation phase of the project is currently in progress and key stakeholders across the institution have been given a number of opportunities to share thoughts on the current system and to provide suggested functionality for any future provision. This consultation phase is crucial in determining the specifications required that will form our tender document which will be published to suppliers in the 2018/19 academic year.

This session will provide an update on the project, key findings from the consultation to date and will inform how staff and students can continue to help shape our future VLE provision.

Working Together: The Enhanced Collaborative Capabilities of Microsoft's Office 365

Marc Bennett, Learning Technologist, NUIT

Graham Collins, Research Computing Analyst, NUIT

This session will illustrate the advantages of using Office 365 collaborative tools to enhance and support educational and research practice. The session will draw from our experiences during the past academic year's piloting of Office 365 at Newcastle.

Microsoft Office has long formed the basis of the day-to-day work of running academia. Recent years have seen increased requirements for scale-up, cross-site collaboration, institutional boundary-crossing, and closer engagement with our students and academic partners. The past decade has also seen the arrival of 'web 2.0' online tools like Google Docs and Dropbox. Easy to get started with, these 'free' tools were initially designed for individuals, not organisations, raising problems further down the line. This pragmatic

hotchpotch of desktop and online tools was pretty much all that we had to meet these challenges.

Microsoft's maximalist response to this, Office 365, is much more than just 'Office on the Web'. With Office 365, the traditional Microsoft Office 'productivity suite' model has been reinvented, increasing the number of available apps, blending and weaving functions from old and new Office applications to enable closer and easier to manage collaboration, inside and outside the institution.

The presentation will include live demo of how a module leader, who is also leading on a research project, can use Office 365 to:

- Setup and oversee student group projects
- Create a collaborative hub to run a research project
- Support a distance learning module
- Mentor and support students on placement

Developing collaborative critical thinking beyond the classroom

Boguslaw Ostrowski, English Teacher, INTO Newcastle University

A web-based digital tool which supports student engagement on traditionally taught courses has been designed to help students explore their understanding of topics by ranking different elements according to their importance and justifying their rationale in writing. On completion of individual rankings, students are grouped or paired, enabling them to view one another's work, to chat online in real time, and to collaborate whereby one mutually negotiated ranking is produced. The app extends the potential for student learning beyond the classroom in a pedagogically valuable way where collaborative critical thinking on topics across the curriculum is made possible.

The minimum viable product (MVP) is currently in the form of a web-based app that can be used on mobile phones, tablets, laptops or desk-top computers. Apps are widely used by students for relaxing, socialising and learning, and a critical thinking skills app for use on students' smartphones represents a stimulating learning tool in a format that students are familiar with and are comfortable using. It can be used both within and outside the classroom, but data can be harnessed at all times without interrupting its use. Students' engagement and learning can be tracked, debated (face-to-face, or electronically), and re-visited at any time. The written element of the app gives students the opportunity to clarify their understanding and reasoning, which may generate new understanding and stimulate deeper learning by revealing connections between a particular activity and other topics covered on their courses.

15:15 Reflecting on partnership: Articulating the purpose of academic representation at Newcastle University

Rowan South, Education Officer

Dr Joe Barton, Representation & Research Coordinator

George Watkins, Representation & Democracy Manager

Newcastle University Student Union

Sam Cooke, Student, School Rep for School of English Literature, Language and Linguistics

NUSU's workshop is designed to engage staff and students alike in a dialogue about academic representation at Newcastle.

Participants will be invited to share their perspectives on student-staff partnership in academic representation, outline the strengths and weaknesses of the academic representation system as it stands with regards to fostering partnership, and identify practical changes that all stakeholders can make to improve the student-staff partnership.

The session will be preceded by a presentation from NUSU's Representation and Democracy Team about the broader context of student-staff partnership, and will close with a summary of work that NUSU is undertaking to enhance academic representation.

The session is open to participants with and without direct experience of the academic representation system.

16:00 **Keynote: Learning gain**

Dr Camille Kandiko Howson

Academic Head of Student Engagement, King's College London

Learning Gain – the attempt to measure the different ways in which students benefit from their learning experience – is now a core part of the Government's plans for higher education. A focus on student outcomes is signalled in the Government's Review of Post-18 Education and Funding and learning gain is a key strand of inquiry in the Teaching Excellence Framework. New approaches to quantifying learning gain and new metrics are being developed through 13 Higher Education Funding Council for England (HEFCE)-funded pilot projects across England.

This keynote will explore the different uses of learning gain, the nature of the evidence used and the various metrics developed which include behavioural, cognitive and affective approaches as well as employability and other outcome measures.

What does this focus on evidence and impact mean for institutions? Does this signal a shift from a sector-wide interest in teaching to more emphasis on learning? What does this mean for staff development? Where can or should the student voice be in enhancement and evaluation? These questions will be debated and policy implications discussed. Practice implications will be explored, including the use of metrics to enhance students' learning experiences, drive curriculum and pedagogical change and support teaching and learning.