



University
of Glasgow

9th Annual University of Glasgow Learning and Teaching Conference

12th April 2016

Welcome to the ninth annual University of Glasgow Learning and Teaching Conference:

'Active student participation in learning, teaching and assessment'.

This year's Conference comes at a time when we are beginning the process of transforming our physical estate following the acquisition of the Western Infirmary site. Our plans for a new Learning and Teaching building are well advanced and we have already begun trialling new teaching environments across campus. Over the next twelve months we will be converting more of our teaching estate into active learning spaces and we expect the groundwork to begin on the new building. It couldn't be a more exciting time!

As we move forward, it is timely for us to be thinking carefully about how we create a future environment that stimulates and deepens the learning partnership by encouraging active student participation in not only learning but also teaching and assessment. At the same time, we must be mindful of other drivers of change affecting the learning and teaching environment globally and, in the longer term, these have the potential to be far reaching. Internationalisation of the student community continues to create both challenges and opportunities as does engagement with transnational education. The continued growth of online and blended learning underpinned by pervasive and robust communications technologies creates the possibility of very different modes of collaborative learning that may ultimately redefine the role of the teacher. These changes, together with the changing demands of society, also challenge our students and have the potential to progressively redefine the attributes of the future graduate. For us, a key priority, therefore, is supporting our staff and students to embrace positive change in a way that brings them benefit and enriches their experience at this University.

I hope you will take the opportunity the Conference provides to explore and reflect on these issues with colleagues from across the University and the Higher Education sector. We are once again fortunate that the event will be enriched by the presence of external delegates, to whom I would like to extend a particular welcome. We have also added an extra element to the Conference this year by creating a display in the Senate room that will allow you to get first hand experience of some of the new teaching environments we will be creating over the summer. Please take the time to look at these and tell us what you think about them.

As a University, we can be justifiably proud of the excellent and truly innovative practice that continues to keep our student learning experience amongst the best in the world and the quality of our annual Conference underlines this.

I hope that you have a very productive day and that you leave our Conference with renewed inspiration to continue to enhance the learning experience of your students.

Best wishes



Professor Frank N. Coton
Vice Principal (Learning and Teaching)

Keynote Address 1

Mind the gap: pedagogical intentions, student perceptions, and the power of partnerships

Professor Peter Felten, Elon University, North Carolina

Emerging research in the United States suggests that university students learn more, and more deeply, when staff are clear and transparent about the purposes, tasks, and assessment criteria of the work we assign in our modules and courses. However, research also demonstrates that students often misunderstand or do not value the work we require of them in higher education. This interactive session will explore the gap between our pedagogical intentions and student perceptions, and will consider how working in partnership with students might enhance transparency, motivation, and learning.

Biography

Professor Peter Felten is Assistant Provost for Teaching and Learning, Executive Director of the Center for Engaged Learning, and Professor of History at Elon University, in North Carolina (US). His recent publications include the co-authored books *The Undergraduate Experience* (Jossey-Bass, 2016), *Intersectionality in Action* (Stylus, 2016), *Transforming Students* (Johns Hopkins University Press, 2014) and *Engaging Students as Partners in Learning and Teaching* (Jossey-Bass, 2014). He is President-elect of the International Society for the Scholarship of Teaching and Learning, and Co-editor of the *International Journal for Academic Development*.

Keynote Address 2

Why you can't buy higher education in a DVD box set: reflections on assessment from TESTA

Dr Tansy Jessop, University of Winchester

This session draws on findings from national and local projects on assessment, technology and student engagement to reflect on some key tensions which make active student participation both absolutely vital and deeply problematic. One tension is between the technical rational frameworks which dominate assessment, and students' lived experience of it. 'Transforming the Experience of Students through Assessment' (TESTA), a national research project on programme-level assessment, provides rich evidence of the impact of modular degree systems on student learning. The tension between a choice-oriented approach to curating one's own degree, and students' disjointed learning experience, is an accidental outcome of the modular system. So too is the growth of summative assessment, accompanied by a decline in formative assessment for learning. This assessment pattern fosters a culture of grade-orientation at the expense of powerful learning. David Boud writes that "Assessment is the principal mechanism whereby academics exercise power and control over students" (1999). The tension between assessment as a pedagogy of control used to direct students' effort and attention, and assessment as a driver of powerful learning is at the heart of TESTA's findings. This session will explore and seek to resolve the paradox of assessment as a means of exercising power over students, and assessment as a means of empowering students.

Biography

Dr Tansy Jessop is the Head of Learning and Teaching at the University of Winchester. She believes passionately in the capacity of assessment to transform the student learning experience. Through leading the 'Transforming the Experience of Students through Assessment' (TESTA) project, she has seen the benefits of taking a programme view of assessment. Tansy's interest in the student perspective is driven by democratic and participatory approaches to pedagogy. She chairs the REACT Steering Group, a HEFCE funded project which aims to widen the reach of Student Engagement beyond the 'usual suspects' using proven approaches. She began her career as a secondary school teacher in South Africa, completing a PhD on teacher development in rural KwaZulu-Natal. She has published on social justice in education, narrative inquiry, learning spaces and assessment and feedback.

**<http://winchester.academia.edu/TansyJessop>
www.testa.ac.uk**

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1A Students' participation in their learning: understanding their prior experiences and expectations

Alan Britton, Education

There is currently a significant emphasis on student participation in aspects of their own learning in Higher Education. This reflects a wider commitment in education at all levels from early years to HE promoting more participative approaches.

The notion of pupil voice in schools settings is well established, albeit implemented with varying degrees of success (e.g. Whitty & Wisby, 2007). Many schools systems across the UK and beyond are committed, at least in stated policy terms, to the extension of greater pupil influence over the teaching and learning process.

This can take the form of wider participative practices and structures such as pupil councils or eco-committees, but it can also involve a greater role for pupils in the construction or co-construction of aspects of their learning experiences. The goals of the schools-level approach to such participation are often related to enhancing learning experiences, but they also often relate to fostering more knowledgeable and active citizens. While the former agenda seems very apparent in the HE discourse on student participation, the latter is arguably neglected. Moreover, many HE practitioners may be unfamiliar with current practice in schools, and are thus unaware of the capacities and experience that new undergraduates will bring with them to University.

This paper will describe some of the policies and educational experiences that university entrants might be expected to have received through their prior education, which are in turn likely to influence their expectations and willingness to engage with such practices once in a University context. This could help HE practitioners set more accurate expectations around the extent to which students will feel entitled to, and capable of engaging with, a more participative approach to aspects such as assessment and feedback; and curriculum design.

The paper will also consider how a renewed focus on student engagement in their learning might achieve both goals described above (both academic partnership and the development of more active citizens with enhanced graduate attributes).

The presenter will deploy his substantial theoretical, policy and practical knowledge of these issues in both schools and HE.

1B Student partnership in e-learning: the development of online resources for students by students in dentistry

Robert McKerlie, Wendy McAllan, Martyn Ritchie, Shabana Hudda, Evelyn Rennie, Amr Taha, Claudia Wasige, Ziad Al-Ani and Jeremy Bagg,
Dental School

Dentistry is a dynamic and ever changing specialty that has been strongly influenced by developments in technology and therefore our teaching strategies must evolve to keep pace with these changes. E-learning has become an integral part of the dental curriculum, with a marked increase in use over recent years. However dental students have up until now been the recipients rather than active participants in the development of dental e-learning resources. Bovill et al (2011) conclude that it is incumbent upon us to reconsider students' roles in their education and reposition students to take a more active part – as co-creators of teaching approaches, course design and curricula.

In this paper the presenters will outline the design and product of a self-selected study module (SSM) offered to year five dental students in e-learning. The SSM offers the opportunity for students to work as small teams with the school learning technologist and academic staff to identify, design, develop and evaluate quality-assured e-learning objects. Each group (n=2) with the guidance and quality assurance of academic staff will create a resource that can be integrated within the current University of Glasgow BDS curriculum for future years. It will become a useful revision resource that will supplement the learning and teaching received elsewhere within the course and will be accessible to all dental students in Scotland via the Scottish Dental Education Online (SDEO) programme.

The SSM provides the opportunity of student participation in learning with technology and designing aspects of the curriculum, and aligns with the University's Learning and Teaching strategic objective of building staff-student partnerships to promote student engagement with learning.

1C Students, Teachers and Assessment: Active Student Participation

Maureen Farrell, Delia Wilson, Margaret Jago and Moyra Boland, Education

Since the publication of "Teaching Scotland's Future", Donaldson's review of teacher education in Scotland in 2011, all universities involved in teacher education have been committed to strengthening and developing partnerships with schools, local authorities and the university community of tutors and students. A significant aspect of this has been the development of joint, shared assessment of school experience – a major aspect of professional learning.

This workshop will showcase how the School of Education has revised the school placement element of the Post Graduate Diploma in Education to include all partners in the assessment of student learning, significantly enhancing the opportunity for active student engagement in the process. The model has garnered substantial international interest.

The revised model of school experience will be presented, identifying the key components of seminars, learning observations, joint shared assessment and reporting and the roles and responsibilities of partners will be outlined.

There will be an opportunity for closer examination of learning observations and the feedback element of the joint, shared assessment process. Participants will be introduced to the key concepts of learning observations and encouraged to examine its potential for student participation. The process of joint, shared assessment will be described with a specific focus on the management of the formative assessment feedback with the student and there will be a discussion of how this system can be effective in promoting student learning. Participants will be encouraged to consider how this process could be utilised in different contexts particularly as a means of addressing aspects of assessment and feedback highlighted in the National Student Survey results.

1D Promoting inclusive and engaged student learning with analytics: engagement via agency

Gordon Heggie, Neil McPherson and Marjorie McCrory,
University of the West of Scotland

Student engagement is a contested concept. Important in the conceptualisation of engagement is the distinction between 'engaging students' and 'students engaging'. While the former focuses on enabling and encouraging engagement through the creation of structured opportunities for learning, the latter, while not reducible to a single definition, emphasises the importance of engagement as an active process, a process of agency (see Bryson, 2014). As argued by Barnett and Coate (2005), encouraging and enabling students as active and reflective citizens, supports them in confronting and evaluating their learning experience in a way that extends ontological engagement, promoting learner agency to support the development of a deeper sense of belonging and citizenship. This workshop will build on a research undertaken at the University of the West of Scotland and communicate the findings of a project that extended the use of learning analytics. Whilst engaging with learning analytics provides educators with the potential to understand more about effective student engagement and learning in higher education, this workshop will explore student understanding of learning analytics and the development of a data profile to support learner agency. Framed around a learning in partnership method and methodology, the workshop will use the student voice to provide evidence that by engaging students as active 'agents' and 'partners' in the development of their own learning experience, enables them to recognise their potential to change the learning landscape and inform their own learning experience and the wider curriculum.

1E Let's do it together: a shared assessment model for a digital class

Lavinia Hirsu, Education

Theories of digital literacies have established that students, along with their teachers, should be directly involved in defining and implementing assessment frameworks for classroom projects. Scholars such as Shipka (2012), Delagrange, McCorkle, and Braun (2013) have pointed out that digital literacies reframe the student-teacher relationships and involvement with the process of learning. In line with this research, in my presentation I describe the shared assessment model that my students were involved in as part of a rhetoric course that I taught at the University of North Carolina, Greensboro, in spring 2015. In this class, students had to produce, analyse, and evaluate digital texts ranging from blog posts, digital image collections, audiotracks, and other multisensorial texts. Given the experimental nature of the projects, I invited my students to be co-participants in the process of evaluation. Instead of imposing a grading rubric, my students and I developed assessment rubrics for each major project. This process allowed students to enact their agency, review their newly acquired knowledge, and revise their notions about student-teacher relations in digital environments. Besides sharing these findings, I intend to address some of the concerns that participants may have regarding this model of assessment. These challenges will refer to: (1) the use of new technologies and the role of 'digital experts,' (2) teacherly ethos and classroom power dynamics, and (3) the dynamic and recursive nature of learning-assessment processes.

1F Flipping the student perspective: using peer-review (Aropa) for effective learning in a postgraduate law course

Suzy Houston, Law

Peer review is potentially useful in large cohorts where students may have few opportunities to get detailed feedback on their writing from teaching staff (e.g. see Arum and Roksa 2011). Prior research in peer review has shown that giving and receiving feedback on the work of other students of the same status can be as effective, if not more so than having work marked by teaching staff (e.g. see Falchikov and Goldfinch 2000).

In October 2015, we introduced peer review into our Civil Litigation course (a core component of the Diploma (PG) in Professional Legal Studies programme) in order to ascertain whether this might be a viable addition to the pedagogical strategy of the course, which is already a blend of online and face-to-face practical teaching. We asked the cohort of 240 students to submit a piece of written work (which would ordinarily have been submitted in hard copy to a tutor for marking) to the online tool Aropa for peer review. After the activity was complete, we surveyed the students to get their feedback on the process and whether or not they felt it was beneficial to their learning experience.

We examine both the technological and pedagogical affordances of using an online peer-review tool, considering the effectiveness of peer-review for formative learning in a practical law subject and its viability as a (possibly better) alternative to tutor-marked work in some situations.

1G Student and staff perspectives on feedback

Wendy Anderson, *Critical Studies*, **Nicole Cassie** and **Don Spaeth**, *Humanities*

This workshop will outline the findings of a series of focus groups on feedback practices in the College of Arts, and engage participants in a discussion of feedback resources to be created for staff and students. In session 2014-15, Nicole Cassie carried out focus groups with students from across the College to investigate students' experiences and understanding of feedback on assessment. This has been extended in 2015-16 through a series of focus groups with staff, led by Wendy Anderson.

The session will begin with a 15-minute talk, setting out the main findings of these studies. The talk will be structured around the issues of clarity, fairness, promptness and usefulness of feedback, aligning with the relevant NSS assessment and feedback questions and with reference to key recent studies in this area (Evans 2013, O'Donovan et al. 2015). The focus group discussions were wide-ranging, with feedback closely tied to overarching issues around assessment. Indeed, much of the discussion in the student focus groups centred on the forms of assessment on which feedback is given, and highlighted a dislike of exam assessment and some suspicion of group work and peer assessment. Students' desire for prompt and targeted feedback will be considered in the wider context of opportunities for feed-forward and formative assessment.

Participants in the session will be encouraged to reflect on their own feedback experience and practice, and to consider the ways in which Subjects can enable students to engage more fully with the feedback they receive and to play an active role in optimising Subjects' feedback practices. The remainder of the workshop session will take the form of small-group discussion centred around the perceived usefulness of possible feedback resources, including: a leaflet or web page on 'how to make the most of your feedback?'; workshop sessions for students and staff; and suggestions for staff on feedback practice.

2A Staff-student partnership as a catalyst for student engagement for all

Roisin Curran, Ulster University

In recent years, awareness of the benefits of student-staff partnerships across the UK and beyond has increased with many institutions promoting practices which shift from a transmission mode of teaching to an interactive collaborative ethos where all participants, i.e. staff and students each contribute to, and benefit from learning situations (Cook-Sather et al., 2014; Crawford et al., 2015; Curran & Millard, 2015; Healey et al., 2014; Little, 2011). However, there can still be reluctance or a capacity deficit on the part of both staff and students on adopting a partnership approach, but as Healey et al. (2014, p.21) highlight 'it is also true that where resistance is most pronounced, the potential for powerful and transformative learning and change is greatest'.

Ulster's participation in the What Works? Student Retention & Success Change Programme, 2012-2015 (HEA, 2012) included an exploration of the 'lived experience' (van Manen, 1990) of staff and students working together in partnership to improve student retention and success. Outcomes from this research demonstrate that staff-student partnerships have similar benefits for staff and students in terms of encouraging; new ways of thinking, the development of new skills, relationship building, motivation and active learning approaches. This can be linked with Cook-Sather et al. (2014) who state that if we engage our students as partners in learning and teaching and this partnership is based on respect, reciprocity and shared responsibility then we can make learning and teaching more engaging and effective for students and staff. A key output from the research at Ulster is a 'Staff and Student Guide to Engagement through Partnership', which demonstrates that engaging all students as partners can be achieved by starting small and focusing initially on learning, teaching and assessment practice. This Guide will be presented and discussed.

2B A flipped classroom approach to a ‘Diabetes Acute Care Day’ improves final year medical students confidence and competence

James G Boyle, Alison M McEwen, David M Carty and Gerard A McKay, Medicine, Niall Barr and Kerr Gardiner, Learning and Teaching Centre, Aileen Linn and Matthew R Walters, Medicine

Aims: Evaluate a novel pedagogical approach to a ‘Diabetes Acute Care Day’ for final year medical students.

Methods: ‘Flipped classroom approach’ with four weeks online pre-access to nine micro-lectures and a quiz. On the day, active learning strategies with an interactive case-based quiz lecture using peer instruction with novel classroom response system (YACRS) developed at the University of Glasgow followed by prescribing skills workshops. Kirkpatrick’s model of evaluation: Level one (learner reaction) measured by survey questionnaire, review of online usage statistics; Level two (learning) measured by confidence questionnaire, case-based and prescribing skills assessment. Ethical approval gained.

Results: 95% (161) students participated. 82% described overall satisfaction for the flipped classroom approach as very satisfied or satisfied. 69% viewed at least one micro-lecture with the total number of unique and cumulative views of the nine micro-lectures being 623 and 686 respectively; with 68 unique and 73 cumulative attempts at the online quiz. Paired analysis confirmed an improvement in mean confidence scores from 4.55 to 7.41. Paired analysis confirmed that mean assessment scores increased from 34% to 59% before peer instruction and to 73% after peer instruction. Participants that viewed the micro-lectures and attempted the online quiz had higher final assessment scores. Unpaired analysis confirmed higher final assessment scores (73% vs 47%) than the preceding academic year that did not use this pedagogical approach but was confirmed to have the same commitment of time.

Conclusions: The ‘flipped classroom approach’ to “Diabetes Acute Care Day” appears to be an effective way to teach acute diabetes care to medical students. This presentation will include an interactive demonstration of YACRS and reflect on how the authors’ findings might translate to different disciplines and contexts.

2E Playing the numbers game: students as assessors in a MOOC context

Leah Marks, Medical Genetics, Sarah Meek and Camille Huser, Medicine

With increasing focus on online platforms in learning and teaching, it is vital to examine how we can best assess students in the online context. The main rationale driving innovative assessment in MOOCs is the unprecedented scale of class sizes. While it may be logistically challenging for staff to mark/give feedback on the large number of student assignments, peers are plentiful. Assessment and feedback must therefore come either from automated processes, like MCQ quizzes or from other students i.e. peer review (PR). PR is an excellent example of active student participation, however its effectiveness must be carefully evaluated.

Our study was based on data from the 6-week MOOC 'Cancer in the 21st Century: The Genomic Revolution' on which there were >7000 students enrolled. Over 200 students took part in a PR task as part of the MOOC. The aim of our research was to investigate the quality of the PRs produced, what factors influence this and the students' experience of the PR process.

Demographic data (age, gender, previous level of education, whether students are currently employed and field of employment) was collected and linked to 79 students who had participated. Peer reviews were compared with staff marking of the written task and the demographic data was analysed in relation to both written task and peer review performance. Qualitative comments were also gathered from various forums and thematic analysis was carried out on these.

Overall, many high quality reviews were generated, and students identified specific benefits to both receiving and giving reviews, including promoting deeper learning. We also found that while several demographic factors may influence both participation in, and quality of initial written task itself, they do not appear to have a marked effect on the quality of the peer review which an individual is able to give.

We will discuss the implications of these results for use of PR in both online and offline environments.

2F Improving essay writing skills - comparing the effects of written and verbal feedback in Animal Biology undergraduates

Ashley Le Vin, Life Sciences

Feedback is essential for student progression and learning (Price et al., 2010) as it allows students to reflect on previous work and consider how to make future improvements (Fry et al., 2003). Without feedback students may struggle to improve upon their mistakes and may continue to make errors affecting their grades. Studies have found that written feedback can provide significant improvement to students learning (Bitchener and Knoch, 2009) as students can refer back to the feedback and take time to digest it. However, students sometime struggle to understand the written feedback (Orsmond & Merry 2010). Verbal feedback although less well studied, has been found to increase student confidence in their coursework (Attali, 2011). Therefore, if staff can engage in dialogue with the students about their written feedback they can gain insight in to how effective they are at communicating their feedback. Verbal feedback may also help build stronger staff-student partnerships which should open the door for future communications.

Here students were given a lecture on effective essay writing, then given time to write an essay from a list of titles. Markers gave written feedback and an initial grade to the student. Students then had time to reflect on the feedback before meeting with the marker to further discuss how they could improve their essay. Students then had a further two weeks to resubmit their essay for a second grading. Data was gathered via a questionnaire on the students perceptions of the effectiveness of the two types of feedback and grades for first and final drafts compared. Students generally saw benefits to both types of feedback and felt more confident to approach staff in the future for feedback. Further, final grades were improved, highlighting to the students the importance of engaging with feedback to improve future work.

3A Towards More Authentic Assessment: Students as Co-designers in a Just-in-Time Model

Joseph V Gray, Life Sciences

Active student learning, with spontaneous interaction/dialogue with instructors, is increasingly common in the classroom. Unfortunately, course assessment is struggling to co-evolve. Assessment needs to be appropriate, authentic and nimble/flexible: a tall order. Solution? Ask the students. This presentation will focus on how the assessment of an advanced course in genetics has evolved to be more authentic, and to accommodate the inherent unpredictability and variability of a research-led, non-didactic course focused on student activity and on direct engagement with the research literature and with researchers. The assessment design has been and is being driven by: 1) a just-in-time model aimed at assessing how students actually experience the course rather than how it was intended/hoped that they would experience it and 2) direct involvement of students as co-designers. An overview of how the final examination was co-designed in recent years will be presented. Focus will be on ongoing efforts to diversify the assessment by co-designing appropriate coursework. A critical analysis of progress, reflections, frustrations, lessons, and the student perspective will be presented.

3B Orientating Students Through Digital Online Resources and Video Interviews

Graeme R Spurr, *Learning and Teaching Centre*

In the 2014/15 session Dr Gavin Miller and Dr Carol Collins were awarded a Learning and Teaching Development Fund to help orientate medical students who were participating in the medical humanities intercalated degree. Previous year's feedback had identified a range of issues surrounding threshold concepts, pre-course anxiety, and unfamiliar disciplinary territory. The award funded two graduate teaching assistants, of which I was one, to video-interview medical students from the prior cohort, and then build an online, orientating resource around the visual and verbal material. The presentation software Prezi was employed, and the video interviews were embedded in this resource.

The resource has provided a positive representation of embedding student feedback online and supports prior research around web 2.0 technologies benefit as both a supplementary and transformative tool for pedagogy and student induction (Alexander, 2006; HEFCE, 2009). However, the cloud-software still provokes a series of issues. The online-software, while beneficial, demonstrates the intrinsic problems of digital-based resources for tertiary education. These are concerned around sustainability, longevity, and the maintenance of such a resource. This paper will highlight the benefits and limitations of such resources and provoke wider questions around online pedagogy and its increasing function within the Higher Education landscape.

3C Embedding social mobility in the curriculum: widening participation in the School of Law

Frankie McCarthy and Megan Rae Blakely, CREATe, Law

Can changes to the structure and delivery of the curriculum improve the support we offer to students from non-traditional backgrounds?

This paper will report on a Learning and Teaching Development Fund project into the experiences of 'widening participation' students in the School of Law. The project made use of assessment and retention data over four years to ascertain differences between WP and non-WP students in the law undergraduate cohort, then conducted interviews with students in the first and final year of the degree to explore the particular challenges that WP students face.

The recommendations resulting from the study include the introduction of 'Oxbridge-style' small tutorials in the first semester of first year, together with the development of a student peer-support network and a more focused approach to advising for WP students throughout the degree. In addition to setting out the findings of the project, the session will discuss the potential difficulties with implementing the recommendations and seek feedback from participants on how these challenges can be overcome, or if they should be overcome at all.

3D Building the Mobile Hub

Owen Barden and Mark Bygroves, Liverpool Hope University

This paper presents interim findings from a case study of one student's mobile phone use in Higher Education. The paper is timely, because although mobile phones and internet access are near-ubiquitous in universities, there is little extant research which reports in detail on the ways in which students actually use these technologies in their everyday learning and lives. Studies published so far tend to take the form of either surveys or ethnographic accounts of classroom practice. Here, we take a different approach. Drawing on data constructed from extended video interviews, we illustrate the way one student, now a co-researcher on this project, evidenced innovative practice with his mobile phone during the course of producing his two pieces of assessed third year work: an academic poster, and undergraduate dissertation. We focus particularly on the multimodal literacy practices used in assembling continuously evolving complex academic texts across multiple devices. We aim to offer insight into students' contemporary literacy and learning practices, and hence contribute to the discourse on pedagogy, assessment, and mobile learning in Higher Education.

3E Motivational effect of feedback on assessment from a self-regulation perspective

Minmin Du and Alvise Favotto, Accounting and Finance

This research project investigates whether and how a student's regulatory focus affects her attitudes and preferences towards different means of feedback on her academic performance. Regulatory Focus Theory (Higgins, 1997; 1998) suggests that the way in which people approach desired outcomes (or avoid undesired outcomes) is controlled by two distinct systems of motivational regulation – promotion focus (concerned with attainment of aspirations and accomplishments) versus prevention focus (concerned with attainment of responsibilities and safety).

With reference to learning processes, prior research indicates that a person's regulatory focus impacts on how she learns from past experience. In response to a failure, promotion focus is associated with counterfactual thinking of how things might have turned out differently if individuals had not missed an opportunity for advancement; whereas prevention focus is associated with counterfactual thinking of how things might have turned out differently if individual had avoided a mistake (Roese, Hur and Pennington, 1999). Feedback is an important source of motivation that communicates absence or presence of desired or undesired outcome in goal pursuit. Promotion-focused students might be more effectively motivated by feedback that suggesting potential improvements towards a better grade, compared with feedback that emphasizes on errors ought to be avoided, which might motivates learning among prevention-focused students more effectively. This hypothesis is tested by undertaking experimental work involving undergraduate and postgraduate student in Accounting and Finance and Business Management at the University of Glasgow. While data collection is still ongoing, we believe that the outcomes of this project may help us tailoring feedback means that better fit individuals' attitudes hence generating a more engaging learning process.

3F What do we learn from teaching one-to-one that informs our work with larger numbers?

Ursula Canton and Sarah Dargie, Glasgow Caledonian University

Although theoretically decisions about learning and teaching activities could include the choice between group teaching and individual teaching, these options are rarely considered in curriculum development for Higher Education. At most universities, group teaching is assumed as the default option for a number of reasons, above all affordability. In areas such as academic and writing support, on the other hand, individual tuition has a stronger tradition (Spoke 1996). The choice between delivering writing support to groups, embedded into students' timetabled curricula, and working individually with students, mainly as an additional form of support, is, however, rarely made as part of a wider curriculum design process. In practice, this decision depends on a variety of coincidental factors, many of them related to organisation and administration, rather than educational concerns. This presentation outlines a research project aimed at providing an educational basis for the choice of group learning or individual support to foster writing skills among students in design subjects.

4A The pros and cons of different ways to foster active student participation and communities of partnership

Colin Bryson, Ruth Furlonger and Fae Rinaldo-Langridge,
Newcastle University

In this presentation we explore active student participation and working in partnership as a concept and practice. Arguably participation catalyses powerful engagement, which is required to enable students to learn transformatively and to 'become' (Fromm, 1978; Bryson and Hand, 2007; Johannsen and Felten, 2014). Healey et al (2014) advocated 'partnership learning communities' as the way to embed such practices. Cook-Sather et al (2014) show, with several case study examples in different contexts, that there are many benefits to both students and staff from students in individual partnership roles with staff (as consultants, co-designers and co-researchers) – which we will call Model A. However the principal defect of model A is that only a minority of students benefit from partnership, it is only the volunteers that come forward who do so. We have been offering Model A opportunities in Combined at Newcastle for some time and seen these benefits (Bryson, 2014). Subsequently we have introduced Model B, where students engage in democratic, collective partnership within modules – to co-design and shape the module as it is undertaken. This involves potentially all students. Model B has different and deeper challenges!

We present our evaluative research, through qualitative, longitudinal research via mixed methods on this case study. The participants have experienced partnership to a widely varying extent, and show diverse perspectives, dispositions and gains. The evidence shows that realising partnership is not straightforward nor is it delivering all its argued benefits to all. We remain proponents of partnership because those students, who do assimilate with it, benefit immensely, and there are wider gains too. However there are many practical and other challenges to overcome. Model B may be more likely to lead to a sustainable partnership community where a far larger proportion of students are direct beneficiaries but is much harder to bring into practice.

4B Undergraduate Medical Students as active participants and co-producers of e-learning tutorials

Aileen Linn, Medicine and Paul Rea, Life Sciences

To learn, students must do more than just listen; learning demands involvement and active participation in the process (Davis, 2002). The ever-increasing suite of digital tools available in higher education means using technology for teaching and learning can be engaging for both instructors and students. However to enable a transformative approach to instructional design and to harness this digital capacity to its full potential it is important to ensure that technology addresses a real need - to enhance student learning and to support the learner (McCulloch, 2009).

As part of a student selected component (SSC) for the Undergraduate Medical degree (MBChB) students became active participants and co-creators of their learning experience in Anatomy teaching through the development of E-tutorials using Articulate Storyline 2 software. A group of 9 students selected this module. Initially they reflected on issues experienced by students on the MBChB programme, engaging with their peers on the course enabled sharing multiple perspectives. The inclusion of the student voice was a key value in the initial development of these digital resources. Based on their discussions the students selected three anatomical regions of the body to focus on, with the aim of using technology to personalise the learning material currently available in a variety of resources into one interactive self-evaluation tool.

The SSC encouraged collaboration and interaction among the students within their groups, the process of designing, planning, and creating the e-tutorials empowered them to be creative, independent, analytical thinker. The evaluation process encouraged problem solving and assimilation of meaningful information; in addition to these graduate attributes the students developed digital skills and knowledge improving their digital literacy and awareness.

The e-tutorials can be produced for publication on the web, for using on mobile devices or in a format that is easily uploaded to Moodle or another LMS. Although this study focused on Anatomy, this software could easily be adapted to any discipline. The finished products will be presented demonstrating that students (in collaboration with teaching staff) should be encouraged to utilise technology to become more active participants and co-creators of their learning experiences enabling the development of personalised learning material to encourage autonomous self-directed learning and to develop new versatility when it comes to interaction in learning environments.

4C Enhancing Student and Staff Engagement with Feedback

Jason Bohan and Maxine Swingler, Psychology, Amanda Sykes,
Learning and Teaching Centre

Feedback is vital in higher education in order to engage students in “deeper learning” (Biggs, 1999), and good quality feedback has been shown to have a positive effect on learning (Black & Williams 1998). Despite this, students often express difficulty in utilising feedback when they attempt future assignments (Hartley & Chesworth, 2000; Jackson & Marks 2014). In fact, feedback quality has consistently received the lowest satisfaction ratings in the UK National Student Survey and is a common complaint heard by course tutors in staff-student meetings. First-year students often face difficulty in understanding and utilising feedback (Poulos & Mahoney, 2008; Yorke, 2002) and their transition can be very difficult for students who move from a highly supported school/college environment to HE which requires them to become more independent and autonomous (Beaumont, O’Doherty, Shannon, 2008).

In this workshop we will present some initial findings from the Leading Enhancements in Feedback project (LEAF), which will include an evaluation of new feedback practices employed in the School of Psychology with a large class of first and second year students which aims to engage students in processes of self-reflection and provides an opportunity for a dialogue between student and markers. The evaluation will report on student satisfaction with the quality and usefulness of the feedback; an evaluation of staff experiences; and the impact on the administration of these practices whilst running a large class. In the workshop we will ask delegates to reflect on their own practices, to identify their own good/useful feedback practices, and to consider ways in which they could modify their feedback practices to enhance student satisfaction.

4D Beyond the Encyclopedia: Wikipedia as learning & teaching tool

Sara Thomas, *Museums Galleries Scotland / Wikimedia UK*

Academics and educators are doing very interesting things with Wikipedia in the classroom. Indeed, we are well beyond warning students not to use one of the world's most used websites for their studies: or at least we should be.

This session, run by an experienced Wikimedia trainer, will begin by exploring the various ways in which Wikipedia is being used to facilitate innovative learning, and to involve students in the creation of open educational resources. Drawing on Scottish and international case studies, a case will be made for Wikipedia (and other Wikimedia projects) as a key tool for collaborative learning, and the application of critical thinking and research skills.

The workshop will go on to offer hands-on experience in editing Wikipedia, using the Visual Editor, rather than traditional Wiki markup. This new addition has made the site the most accessible that it has ever been, and those involved in Wiki outreach are hopeful that its introduction will increase the number of editors actively contributing to the site.

4E The pleasures and pitfalls of formative feedback: practice activities in an academic writing course

Gayle Pringle Barnes, *College Office, Social Sciences*

This presentation reflects on an initiative to increase opportunities for formative feedback in an academic writing course. Formative feedback has been associated with both improved performance and with empowering students to take more control over their own learning (Nicol and Macfarlane-Dick, 2006). However, in order for learners to benefit, this feedback must be delivered in an effective manner (Boud and Molloy, 2013; Carless et al, 2011; Nicol and Macfarlane-Dick, 2006). The presentation will present an evaluation of this ongoing initiative.

Formative feedback is here explored within the context of non-credit-bearing courses on academic writing for taught postgraduates in social sciences. Students completed short writing tasks which were then reviewed by the tutor and returned, with formative feedback, at the next class session. Students and the tutor then reflected on and discussed this formative feedback in class and considered implications for the design of subsequent classes and assessment tasks.

We will consider the outcomes of the initiative, reflecting on the experiences of participants, both students and tutor. We will discuss the 'pleasures' that formative assessment can bring to the learning experience, but also some of the 'pitfalls' that have emerged, and how these are being addressed. Future implications and the wider applicability of the approach will also be explored.

4F “Tweet This!” Using Twitter to Support Social Pedagogy Practices that Successfully Engage Students and Enhance Learning

Victoria Shropshire, *Critical Studies*

The role social media should play in education remains unclear; some educators ban it, others embrace and integrate it, and a large number of stake-holders remain uncertainly positioned somewhere between these two extremes (Bowen, 2012). As a writing instructor at a small four-year liberal arts university in America, I found Twitter, specifically, to be an innovative and effective tool for engaging students and enhancing learning in a course with social pedagogical approaches to writing and research outcomes.

Researchers at Georgetown University are credited with first labeling what they call “social pedagogies” which they define as “design approaches for teaching and learning that engage students with what we might call an ‘authentic audience’ (other than [solely] the teacher), where the representation of knowledge for an audience is absolutely central to the construction of knowledge in a course” (Bass and Elmendorf as quoted in Bruff, 2012). Twitter is a natural fit to this “peer-based” social pedagogy, as it is “not the transfer of information or status messages that are crucial factors, but rather, the opportunity to be a part of someone else’s process by reading, commenting, discussing or simply enhancing it” (Ebner, et al 2010). Microblogging helps users be a part of a larger community that is working on a specific problem without restrictions on time and space.

During a three-year study (from 2011-2014) I found that Twitter aided in improving student motivation and engagement, helped students strengthen relationships, develop a more social/collaborative view of learning, added new dimensions to student research and rhetorical analysis, and helped them make inspiring connections between the world and their writing and research processes. This presentation details the motivation, planning, and execution of Twitter into a writing and research course that effectively increased student engagement and increased active student learning.

5A Student motivations for co-creating their curricula

Cherie Woolmer, Learning and Teaching Centre

Cook-Sather et al (2014) provide a comprehensive account of the principles and processes of staff and student partnerships in learning and teaching. They note: 'Partnerships are based on respect, reciprocity, and shared responsibility between students and faculty. These qualities of relationship emerge when we are able to bring students' insights into discussions about learning and teaching practice in meaningful ways' (2014, p. 1).

This presentation builds upon the ideas presented in Cook-Sather et al by exploring the experiences of undergraduate students who have participated in co-creating their own curriculum. It draws upon interview data gathered from 14 subject areas in seven universities across the UK and Ireland. The presentation focusses specifically on the reasons given by students for getting involved with co-creation activity and their experiences of working in collaborations with staff. It highlights the multifaceted nature of collaborating in this way and how students' expectations and experiences included in the study changed over the duration of each activity.

The data from this empirical study will be of interest to staff and students who are considering starting or building upon existing collaborations. Participants will be able to discuss how the data from the study might help inform how we communicate and advertise such opportunities to students.

5B Recycle, Repurpose, Reimagine: Using open source technology to enhance student's learning of Research Methods

Helena Paterson, Phil McAleer and Heather Cleland Woods, Psychology

At Masters level we teach a Research Methods course where students from varied backgrounds, including home and international students, either come with no mathematical or science background and a deep anxiety centred on statistics, or simply come to enhance their skills. Due to such varied ability we have encountered two divisive issues. The first is in marrying practical skills, such as experimental design and report writing, to student perceptions of research method as being primarily about learning statistics. Secondly we are challenged, in a single class, to fully realise the potential of students at all the different levels of experience. Our solution has been two-fold. As recommended by Chew and Dillon (2014), within the practical classes we have de-emphasised elements such as theoretical statistics, focussing more on student-centred and student-led group activities about developing research questions and discussions. Secondly, we support student-led discussions with online technology as well as making extension activities available that facilitate autonomous learning of statistical concepts at a level that is most comfortable for each individual. Extension activities are resourced through open access or repurposed sources. For instance, we repurposed our Level 2 Echo 360 recordings to act as introductory lectures to students; recommended Coursera courses in statistical theory; evaluated and recommended YouTube movies and other online resources. Since open resources encompass a great range of material, they allow students to self-select the level at which they will engage and effectively widen the range of resource available to students. The purpose of this has been to change student focus in class from anxiety about statistics, to student-centred activities on research evaluation and synthesis while enhancing self-efficacy and confidence on our learners. We report here on staff and student experiences of using open source materials to show which types of resources were most accessed met our goals.

5E Using technology to enhance student learning in assessment and feedback processes

Susan Deeley, *Urban Studies*

The aim of this presentation is to examine various uses of technology to enhance student learning in assessment and feedback processes. The presentation is based on a service-learning Honours course in Social and Public Policy, which focuses on active citizenship and students' voluntary work. Combining theory with practice, the course also includes the development of employability skills and attributes, on which students' critical reflections are co-assessed through an oral presentation. This involves the students' self-assessment and the teacher's assessment, whereupon a grade is mutually agreed through discussion and negotiation based on written critical comments. This enables students to develop their communication and self-assessment skills by comparing their own assessment with the teacher's feedback (Deeley, 2015; 2014). Constructively aligned to the nature of the course (Biggs and Tang, 2011), the assessment also includes: a critical incident report, which is a structured exercise in critical reflective thinking; and a reflective journal, which is a metacognitive narrative of the student's learning.

The technologies used were:

- the University's Echo360 system and Google Glass to record students' oral presentations for their reflective self-assessment;
- Camtasia audio-visual screencasting, to deliver feedback to students on their written critical incident reports via individual mp4 files accessed through Moodle;
- Mahara, to provide weekly feedback on journal entries that aimed to promote students' deeper understanding of the connections between their practical experiences and the theoretical coursework.

While it was found that the technology, in many ways, supported students' deep learning, some drawbacks for staff and students were identified. This presentation critically examines positive and negative aspects of using technology in assessment and feedback processes, which may be useful for others considering adopting a similar practice. However, it is asserted that using technology may revitalise processes that aim to infuse students with intrinsic motivation and help them become self-regulated learners.

5F Let's Talk About [X]: active student participation in Glasgow's undergraduate research conference (and new journal, [X]position)

Scott Ramsay and Andrew Struan, Learning and Teaching Centre

Concept: We present research findings from the first two years of our campus-wide, interdisciplinary undergraduate research conference, titled *Let's Talk About [X]*, wherein we analyse active student development of Graduate Attributes and the impact of research engagement opportunities for undergraduates.

Background: Engagement in undergraduate research is one of the key determiners in continued academic success and development into advanced study (Laursen et al., 2012), but that research represents an effort and a contribution to knowledge that is often overlooked outside the boundaries of course assessment procedures. In addition, with increasing pressure in UK HEIs to demonstrate scholarly impact, high-achieving students who intend to progress in research are implicitly expected to go beyond mastering the academic presentation, and must also develop their public engagement skills. We sought, therefore, to allow students a new platform on which to present their scholarly contributions.

Implementation: Abstracts were invited from all four colleges and successful speakers were drawn from all years of undergraduate study, with a majority from Honours. The speakers and audience all attended as an extra-curricular activity after widespread marketing through email, MyGlasgow, and a print and social media campaign (*@TalkAboutX*). Most presenters' research topics were based on the work from their dissertations and projects. Other research topics included summer work undertaken voluntarily by engaged students. The main criteria for selection were evidence of an undergraduate research project where the student had made an original contribution to knowledge, and where they could engage the public in accessible discussion.

The conference was organised by staff in, and funded by, the Learning & Teaching Centre, and the Writing Centre postgraduate teaching assistants played a central role in the presenters' development. Each speaker was paired with a postgraduate mentor from outside their discipline to help develop their 10-minute presentation for a non-specialist audience. Public engagement was emphasised in order to develop the presenters' Graduate Attributes. In feedback from all involved, the mentoring process is repeatedly heralded as a significant and novel strength in the conference organisation. Without this mentoring, many of the presenters felt they would not have been able to talk comfortably and ably to a large audience.

Outputs: This opportunity has never before been provided at Glasgow and is not widely practised in UK HEIs. We hope to impress upon delegates the benefits of increased, diverse engagement with high-performing students, the untapped ability of undergraduate research presenters, and the impact of mentorship on developing engaging dissemination skills.

We will further discuss plans to expand into an online research journal, *[X]position*.

P1 Evaluation of the active learning approach on the students' quality of learning in Singapore

Lim Li Hong Idris and Christian Della, Engineering

This study is conducted to evaluate the effect of encouraging the active learning approach on the students' quality of learning, so as to develop effective learning environments and approaches in teaching for Singapore. This is an area on the UK Professional Standards Framework (UKPSF) for teaching and supporting learning in higher education that the Singapore-based lecturer would like to develop. A questionnaire has been designed with a combination of open-ended and closed format questions, so as to obtain students' comments which enhance the quality of the feedback. The difference in feedback from two groups of students with varying expertise, as well as their GPA scores at admission, has also been considered. An evaluation of the classroom activities has been conducted in the following sequence: (i) Appreciation of the importance of the subject matter through real life examples and videos; (ii) Appreciation of the subject matter through MATLAB simulations; (iii) Effectiveness of mini classroom exercises in their learning; (iv) Impact of the peer discussions on their understanding and future study methods; (v) Evaluation of experience on pre-reading of lecture notes; (vi) Impact of pre-reading materials on their learning; (vii) Attainment of intended learning outcomes. Last but not least, the students are asked to feedback on whether they thought that their quality of learning has been enhanced through the classroom activities and if the intended learning outcomes of the course have been met. A reflective study on the feedback from a colleague and an expert in the subject was also considered, to provide a non-biased view of the teaching and learning experience. Based on the evaluation study, a summary of good practices and improvements is presented.

P2 GUSTTO: Building a ‘Best Practice’ online community

Helen Purchase, Computing science, Lisa Bradley, Urban Studies, Chris Lindsay, Philosophy, Michelle Welsh, Life Sciences, Susan Deeley, Urban Studies, Niall Barr and Kerr Gardiner, Learning and Teaching Centre and Catherine Omand, Senate Office

There is a wealth of good pedagogies practiced around the university – teachers are continually trying out new ideas to improve teaching and learning. Many of these novel ideas are never publicised: they have simply been developed over time by practising teachers who have experimented with various activities and found them useful.

A current two-year LTDF-funded project aims to (a) collect innovative ideas from across the university in the form of structured narratives based on successful practice (called “Teaching Tips”), and (b) make these narratives available as a searchable university-wide resource, in the form of an online database.

The online resource (GUSTTO: “Glasgow University’S Teaching Tips Online”) will support the initiation and continuing development of a collegial academic community based on the sharing of good teaching practice, enabling members of our teaching community to showcase their innovative teaching practices, and to explore, discuss, and make use of those of others.

By including concepts taken from social media and gaming, GUSTTO will be an interactive and engaging system that supports the spread of good ideas across the university, thus building an active in-house teaching community.

This project relates to two important objectives of the Learning and Teaching Strategy: providing a supportive environment to enable staff develop and improve their skills and to have excellence showcased and recognised; and the continual enhancement of teaching quality through the sharing of innovative ideas.

This poster will outline the aims of the GUSTTO project, will provide examples of the Teaching Tips we have collected so far, and will showcase our existing prototype of the online system. Teaching staff interested in contributing to the project are very welcome to come and discuss it with us – the more people involved from across the university, the better the system will be!

P3 The design of animations and multimedia for teaching

Craig Daly, Dorothy Aidulis, Janette Bulloch, Life Sciences and Minhua Ma, University of Huddersfield

There have been very few studies on the effectiveness of multimedia as a learning tool (Rolfe & Gray 2011). Our hypothesis was that students would prefer animated presentations and that learning would be enhanced. However, it has previously been reported that static images worked just as well as animation (Paik & Schraw, 2013). These authors examined the '*Illusion of Understanding*' in which students invest less cognitive effort when viewing an animation that appears to be easier to understand. Therefore we have investigated the use of animations versus static images in an instructional multimedia presentation.

We created two versions of a 3D animation describing vascular function. Version 1 had a full 3D moving animation whilst Version 2 had 17 static images from the animation. 54 Students (two groups of 27) viewed version 1 or 2 and then answered a short 8 minute question. The marking criteria assigned 'core' marks (essential material) and 'bonus' marks (correct use of terminology) for each answer. Although results showed a trend in favour of animation this was not statistically significant. Students were also asked for feedback on the process.

Student feedback was 88% positive showing a clear desire for more animation type content for revision. Our results illustrate the '*Illusion of Understanding*' as appetite for animation did not translate into better grades in this form of 'single view' assessment. Although we observed a trend in favour of animations over stills, this did not reach significance. Future animations of this type will need to have lower extraneous (unnecessary) cognitive loading (i.e. background music) and any assessment should feature multiple views with user playback control. The results of this study further confirm that 3D instructional animations *per se* will only be of value if appropriate multimedia and cognitive load theories are taken into account (Reed 2006).

P4 How can collaborative learning technology activities embedded in the curriculum improve constructive feedback?

Sarah Dargie, Glasgow Caledonian University

Students were asked to create a personal creative blog through which they can document their creative work using text and visuals. A multimedia blog has been recognised as a useful tool for learning within design based subjects because 'The language of design is experimental, visual and contextual. It is critical to not depend solely on verbal or written data to inform the process.' (Laurel 2001).

The collaborative blended learning activities will be used to generate both peer and tutor feedback on design solutions being presented by the student. This feedback will be treated as formative and it is hoped that on monitoring the online and face-to-face discussions that I will have 'The opportunity to discuss misunderstandings with individual students or the entire class' (Reinecker et al. 2015). Furthermore, by using the blog as an annotated reference to their own creative development, it is hoped that individual students may develop 'a better understanding of content' (Dysthe & Engelsen 2005). The feedback can then be evaluated using a personalised reflective submission which can be added to the self-assessment forms already included within course content. This study therefore will explore technologies which which can have a positive impact on the way design students interact with their ideas and aims to explore wheather this approach can have a positive impact on their design development.

P5 The Collaborative Development of an Occupational Psychology Internship: Students and Employers as Partners

Renée Bleau, *Education*, **Ian Bushnell**, *Psychology* and **Dickon Copsey**, *College of Social Science*

This poster presentation will detail the collaborative development of an Occupational Psychology Internship (OPI), with students and employers as partners. Some students have reported the lack of opportunity when it comes to Psychology Internships, albeit there are many generic opportunities available in related fields such as HR and business. The OPI project seeks to create opportunities to facilitate a path for future psychologists particularly interested in the world of work.

The presentation will provide showcased information on the exploration and development of a partnership, working with psychology students engaged as collaborators (Cook-Sather, *et al*, 2014) in the process of developing the Occupational Psychology Internship (as a non-credit bearing option), through connection with a local Glasgow-based Occupational (Business) Psychology Organization employer, McAdam King (<http://www.mkbusinesspsychology.co.uk/>). The project is supported by the College of Social Science Employability Office for sustainability going forward and it will be quality kite-marked by the British Psychological Society, Division of Occupational Psychology, with Supervision and Mentoring supplied by one of the BPS DOP Leadership Development Programme 2015-16 cadre (see Bleau, 2015).

The University of Glasgow graduate attributes which will be fostered in collaborating and engaging in the development of the OP Internship are: "Being Resourceful and Responsible", "Being Confident" and "Being Effective Communicators" (<http://www.gla.ac.uk/students/attributes/>).

It is further expected that successful recruits who then go on to complete the OP Internship will derive a number of benefits, not least of which will be to meet the challenge highlighted in the November 2015 Green Paper, Fulfilling our Potential: "While employers report strong demand for graduate talent, they continue to raise concerns about the skills and job readiness of too many in the graduate labour pool". It is anticipated that evaluation criteria of the OP Internship will be embedded into its design in order to allow empirical evaluation of this proposition.

P6 Using Appreciative Inquiry to Evidence Attainment of Graduate Attributes

Clare McFeely, Deirdre Moriarty, Nursing and Health Care and Amanda Sykes, Learning and Teaching Centre

In 2014/15 the Nursing & Health Care School at the University of Glasgow (UoG) used an Appreciative Inquiry (AI) approach to evaluate the Bachelor of Nursing (Hons) Programme. AI uses positively framed questions to identify the strengths of an organisation and the potential to use these to develop other areas of practice (Cooperrider 2008).

The inquiry was conducted in three stages. In stage one partners in practice (mentors and senior nurses) completed interviews and open question questionnaires to identify the strengths of UoG students in clinical settings. In stage two, teachers, students and graduates came together to identify aspects of the programme that created, nurtured or developed these strengths. In stage three representatives from clinical practice, teachers, students and graduates participated in a workshop to reach consensus on the programme strengths.

Clinical staff stated that UoG students consistently performed well in clinical practice. Mentors valued student's theoretical knowledge and application of this to practice and commended student's professional presentation and approach. These strengths map directly to nine graduate attributes.

Stages two and three identified interdependent strengths of the BN (Hons) programme which support the development of these attributes, from the overall ethos to practical delivery of the programme. For example, participants suggested that teaching staff, who are experts in their field, create knowledgeable students but their enthusiasm, approachability, respect for students and high expectation of student conduct were equally valued in developing professionalism in students.

We conclude that the programme produces graduates who demonstrate the abilities, qualities and skills which UoG strives to achieve. AI was a positive and enjoyable experience for participants, provided constructive feedback to the school and demonstrated attainment of graduate attributes which are valued in the clinical setting. We would encourage colleagues to engage with this method.

P7 Exploring English for Academic Study Telecollaboration

Anna Rolinska and Bill Guariento, Modern Languages and Cultures

This interactive poster presentation reports on a number of technology-enabled interventions to the design of a pre-sessional English for Specific Purposes (ESP) course for prospective science, engineering and technology (SET) students. Based on the experience of the EAST (English for Academic Study Telecollaboration) Project (<https://easttelecollaboration.wordpress.com>), the poster can be helpful to any educator interested in setting up, running and evaluating student partnerships at the distance.

Similarly to the previous years, the EAST course assessment included writing an extended essay and delivering a short presentation on a topic related to engineering. This course design was considerably revised in August 2015 to include a strong element of collaboration. This was dictated by the research into the particular needs of engineering students and job market's expectations of engineering graduates.

As a result of the revision, the students based in Glasgow formed small groups and got linked up with pairs of engineering students at the Islamic University of Gaza in order to work together on authentic and highly contextualised SET scenarios from the Gaza Strip, devised by the Palestinian students. UofG students analysed the problems and evaluated solutions while their peers at IUG acted as critical friends and provided content-oriented feedback. At the end of the project, the pre-sessional students delivered group presentations to the audience in Gaza via a videoconference link. The output seemed of higher quality in terms of critical analysis compared to previous years, which can be attributed to working in groups and to the authenticity of the task.

In an end-of-project survey, the students from both institutions commented on the range of positive outcomes, including the development of subject knowledge, engagement with real-world issues, and practice in transferable skills.

The poster outlines the milestones of the project, evaluates it by analysing the data from the questionnaires and students' reflections and presents artefacts created by the students during the five-week course. The audience will be able to sample them via the augmented reality interface associated with the poster. **In order to access the interactive elements, a viewer will need a free app on their mobile device - detailed instructions will be provided.**

P8 The sky is the limit: reconstructing physical geography fieldwork from an aerial perspective

Richard David Williams, *Geographical and Earth Sciences, Stephen Tooth and Morgan Gibson*, *Geography and Earth Sciences, Aberystwyth University*

In an era of rapid geographical data acquisition, interpretations of remote sensing products (e.g. aerial photographs, satellite images, digital elevation models) are an integral part of many undergraduate geography degree schemes but there are fewer opportunities for collection and processing of primary remote sensing data. Unmanned aerial vehicles (UAVs) provide a relatively cheap opportunity to introduce the principles and practice of airborne remote sensing into fieldcourses, enabling students to learn about image acquisition, data processing and interpretation of derived products. Two case studies illustrate how a low cost DJI Phantom UAV can be used by students to acquire images that can be processed using off the shelf Structure-from-Motion photogrammetry software. Both case studies are drawn from an international fieldcourse that takes students to field sites that are the focus of current funded research. Results from a student questionnaire and analysis of assessed student reports showed that using UAVs in fieldwork enhanced student engagement with themes on their fieldcourse and equipped them with data processing skills. The derivation of bespoke orthophotos and Digital Elevation Models also provided students with opportunities to gain insight into the various data quality issues that are associated with aerial imagery acquisition and topographic reconstruction, although additional training is required to maximise this potential. Recognition of the successes and limitations of this teaching intervention provides scope for improving exercises that use UAVs and other technologies in future fieldcourses. UAVs are enabling both a reconstruction of how we measure the Earth's surface and a reconstruction of how students do fieldwork.

P9 To R or to SPSS: does autonomous choice of learning technology affect competency & anxiety in Psychology undergraduates?

Dale J. Barr, Institute of Neuroscience and Psychology, Phil McAleer, Niamh Stack and Maxine V. Swingler, Psychology

Statistics modules are commonplace on university programmes, both undergraduate and postgraduate, with often a proven level of competence being a mandatory requirement in order to advance within the degree – particularly in Psychology and Social Sciences (Chew & Dillon, 2014; Gould, 2010). However, a number of studies have found that when asked, students rate themselves as more anxious about statistics than any other module, potentially leading to negative attitudes towards not only statistics but towards their degree and their own general abilities. At Glasgow, L3 Psychology students are encouraged to co-create their engagement with learning technology by choosing between utilising one of two software packages for statistics: a) SPSS – a point-and-click programme with rich Graphical User Interface (GUI) environment; the traditional industry norm; taught in L1 and L2; or b) R – a text-input programme with sparse GUI environment; showing a growing presence in the discipline; introduced at L3. SPSS has the advantage of pull-down menus making it straight-forward to use, though it requires no understanding of the computation performed meaning students often have variable understanding of the processes involved and problems interpreting the output. R in contrast requires students to develop a knowledge of coding and functions and is fast becoming the preferred software by researchers; knowledge of R has been shown to enhance graduate attributes and attractiveness to employers leading to increased earnings post-degree (DICE Tech Salary Survey, 2014). Thus, to compare the effect of self-selection of software, and in turn self-directed learning in statistics, we will use the Statistics Anxiety Rating Scale (STARS) (Hanna et al, 2008), as well as a series of open ended qualitative questions and student grades achieved, to explore the above issues with our Psychology students, establishing if having the autonomy to choose impacts on perceived and actual competency, and on statistics anxiety in general.

P10 Involving Students in the Development of an Interactive Online Course for Statistics

Sue Turnbull, *Mental Health & Wellbeing* and **Maria Gardani**, *Psychology*

We will report on the second phase of a project we have been working on to examine post-graduate clinical psychology students' needs with regards statistics teaching and exploring how best to deliver this within an online environment. Clinical Psychology is a professional doctorate with students funded by NHS Education Scotland and employed by the NHS for the duration of the programme. We believe that it is important that they have an influence over and ownership of their learning experiences during their training. Written feedback was collected on perceptions of current teaching provision and opinions on delivering content online. Focus groups were conducted with those with high and low prior research experience and statistics self-efficacy to explore how current teaching meets expectations in students with differing learning needs and what would be required in an online teaching environment. The entire cohort from one year (N=25) participated in completing the written feedback with an additional seven participating in two focus groups. Learning requirements within an online environment were explored and used to inform recommendations as to the development of interactive online resources. Thematic analysis (Braun & Clark, 2006) was used to analyse written comments and the focus groups. Themes with regards current teaching provision, and the expectations and concerns as to how this teaching could be delivered online will be presented along with a discussion as to how this is informing the design of an online course for this element of the teaching programme.

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Principal Fellows

Denis Fischbacher-Smith
Moirra Fischbacher-Smith
Matthew Williamson

Senior Fellows

Catherine Bovill	Rob Dekkers*	William McGuire*
Tara Brendle*	Robert Doherty*	Jane MacKenzie
Rhona Brown*	Lee Dunn*	Robert McMaster*
Anne Campbell*	Joseph Gray*	Gayle Pringle Barnes*
Gordon Curry*	Susan Jamieson*	Helen Purchase*
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