An Adventure in Team Based Learning

Team Based Learning (TBL) is a strategy that can be used to deliver high quality interactive teaching to a large group. TBL is facilitated by one expert tutor who leads the whole class, while at intervals the students analyse specific problems in small subgroups and use peer group analysis and discussion to solve problems.

TBL was first recognised as an educational strategy in 1982 at the University of Oklahoma business school. It has since been used by employers in the workplace and academic institutions to deliver effective teaching to large groups. The use of TBL in medical institutions in the United States is well established and it is recognised as an efficient and effective method to deliver teaching. Theoretically there are three main phases to TBL; student preparation, readiness assurance and application. TBL uses educational principals of team working, application of knowledge, peer discussion, timely feedback and peer evaluation to achieve specific learning outcomes.

A new curriculum was introduced at the University of Liverpool Medical School in 2014. The new curriculum was implemented to 1st and 3rd year in September 2014, with 2nd and 4th year changing in September 2015. In 3rd year the redesign resulted in 7 “consolidation weeks” spread throughout the year, during which the students do not have any clinical commitments and attend teaching based at the University. Students are divided into groups of 40 students for these sessions with one tutor to address specific learning outcomes. TBL allowed delivery of new material with current tutor resources whilst also enhancing the student experience.

TBL is being used to deliver two hour teaching session to all (320) 3rd year students in each consolidation week, addressing learning outcomes from both the Long Term Conditions and Acutely Ill Patient streams of the new curriculum. At the end of each session the students complete an evaluation of their attainment of the learning outcomes and engagement with the session via a brief questionnaire.

The quantitative evaluations and qualitative feedback from the students from the first academic year will be presented at the conference, along with the views of tutors about the benefits and challenges of implementing this new style of teaching whilst not fully adhering to the principles of TBL as defined in the literature, and despite initial concerns and reservations from both staff and students, the sessions have been well received on both sides.

Human rights and clinical psychology training: A pilot of an EBL approach to teaching on human rights decision-making, leadership and evaluation

This presentation will report on the development and pilot of an enquiry based learning approach to human rights education with students on the university’s Doctorate in Clinical Psychology programme. As part of a collaboration between Mersey Care NHS Trust and the University of Liverpool, and funded by the Equality and Human Rights Commission, the resources were co-produced with service users, trainee (student) clinical psychologists and qualified clinical psychologists from different specialisms. The resource pack includes materials on human rights in clinical practice, how to use human rights as a practical, clinical, framework to resolve ethical dilemmas and human rights leadership in organisations. The presentation will report on the development, pilot and evaluation of the resource pack and discuss the applicability of this teaching resource and approach to other health and social care training programmes.

How to develop and deliver EBL (Enquiry-Based learning)

This presentation provides an overview of the key concepts and steps involved in EBL (Enquiry-Based learning), which is based on PBL (Problem-Based learning), and highlights its relevance to clinical psychology training. The EBL Clinical Health Psychology teaching unit at Liverpool was changed in 2013/14 from traditional, largely didactic teaching with one-off lectures focusing on specific health conditions, to EBL group learning. The initial pilot involved 45 trainee clinical psychologists from years 1 and 2, divided into four groups. Individual and group learning was triggered through using eight very different, clinical vignettes (two per group), based on actual complex patients or service issues. The vignettes were written by eight practising NHS clinical psychologists working in diverse specialties and settings, who also facilitated the groups. The groups alternated self-directed with facilitated learning sessions (three of each). The teaching unit concluded after six weeks with a full day of trainee-led PPT presentations, and the sharing of extensive electronic archives of learning resources for each case.
Hilary Dreaves [Public Health]
Beyond the acronyms – action learning to build capacity in Health Impact Assessment (HIA)
This presentation gives examples from the UK and France of what works (and what doesn’t) when building organisational capacity and personal skills in HIA.

Michaela Higginson, Julie Hanna, Alison Armfield plus Occupational Therapy Students [Occupational Therapy]
Developing a creative approach to reflection
The aim of this presentation is to share a new approach for teaching reflection with Level 5 (Year 2) Occupational Therapy Students. The new approach included an innovative electronic ‘storyboard’ combined with experiential learning opportunities aimed at enhancing skills and confidence in reflection. Staff involved in the development of the approach and the delivery of the content will share their perspective, along with students who experienced this approach for the first time in the 2014/15 academic year.

Dr Neil McCauley & Dr Helen Vaughan [Physics]
A Hot (Wheels) solution for collaborative, problem solving in the physics laboratory
To fit with the New Physics curriculum, encouraging expert-like thinking and developing problem-solving, and to provide experimental design opportunities in year 1, a collaborative open-ended project using cheap toy cars has been developed. Teams of students use experimental observations and theoretical predications to estimate the distance a toy car will travel when launched from a ramp. This presentation will chart the development of this activity from an alternative to scripted laboratory practicals, recognised by students as “making them think”, to one that brings the physics skills introduced in the first year into context and provides a platform for projects encountered in subsequent years.
Dr Luciane V Mello and Dr Andy Bates [Life Sciences]
Reflective research project assessment using PebblePad

A perennial problem with the effective assessment of extended project work is the reliable evaluation of the progress of the students. This is considered to be an important component of the work, but is in the hands of the supervisor alone, and is very difficult to moderate. For a number of years, we have used an online system to allow Year 3 UG project students and their supervisors to report periodically on the student’s progress. It was designed initially to provide evidence in the case of supervision problems.

This work presents the development of this idea with the implementation of PebblePad pilot exercises at two different years, 3 (UG) and 4 (Integrated Masters), to encourage an open and supportive dialogue between student and supervisor. Bespoke online forms were developed using PebblePad to encourage students’ reflection on their progress. These are then submitted to supervisors for corresponding questions to be completed in the context of a specific progress meeting. More reflection from Masters students was encouraged, where additional Likert-style assessment questions were included to provoke discussion between student and supervisor, not just on their progress, but regarding an evaluation of pre-meeting preparation. We intend to develop this quantitative analysis into an evidence base for assessment.

Mike Knight, Ben Devereau and Alex Dusterloh [Architecture]
Large scale use of an iPad based feedback and assessment system in studio teaching in Architecture

This is a report on the use of an iPad based system first presented at the L&T conference in 2012 which has now been rolled out into all three years of the undergraduate BA Architecture degree involving nearly 600 students. The presentation will present the use and development of the system as a result of feedback from both staff and students, together with its role in end of semester assessment. Advantages and disadvantages together with lessons learnt and futures plans will be presented.

Dr Claire Moxham and Victoria McCall [Management School]
The golden thread: Professional development as part of the online classroom

Professional and Personal Development Planning (PDP) is a key element of Postgraduate Master’s programmes, yet is often overlooked in the online environment. This presentation will share details of how PDPs have been introduced to the online programmes within the Management School. The presentation will reflect on good practice and also recognise areas for further improvement of the PDP process. Feedback from students and instructors will help to frame the findings.
Emma Thompson & Dr Pippa Hunter-Jones [Library; ULMS]

**Experiential Learning On Campus**

Students on the 2nd Year ULMS Market Research module have been engaged in a live market research project with the University Library as client for the last two academic years. The cohort of over 100 students work in small groups on a series of mini projects identified by the library in partnership with the module leader. These projects are designed to provide the students with a chance to put into practice the Market Research techniques they learn during the module. This partnership with ULMS has given the library a valuable student insight into library services, providing evidence for change and quality enhancement, whilst enabling students to experiment with Market Research techniques in a friendly and familiar environment. We would be interested to explore the possibilities of using a University service as client for student consultants from other programmes.

Rachael Collins and Helen Scott [Careers & Employability Services; Management School]

**Integrating theory and practice in work-related learning: supporting a critical and reflective approach for students on a year in industry programme.**

This presentation will highlight the successes and key learnings of co-delivering the Management School pre-placement module 'Career Skills & Current Issues in Business'. Focus will be on the partnership between The Careers & Employability Service and Management School and the innovative learning and teaching methods used when delivering a highly practical module to increasing student numbers.

The module aims to prepare students for a year in industry by providing them with the tools required to secure a placement. A critical pedagogical approach to placement learning moves beyond the development of just 'employability skills' sought by employers and encourages students to critically reflect on the extent to which they have developed skills relevant to the graduate labour market.

The placement learning material and practical workshops allow students to question taken-for granted assumptions and design theoretically informed questions prior to going on placement. There are three main elements to assessment in this module including a written report providing a critical analysis of a company, a group presentation about an international sector and a reflective portfolio. A former placement student will provide an insight into how skills gained suits both academia and industry enabling a more fluid transition between the two worlds.

Dr Helen Aspinall & Dr Lis Rushworth [Chemistry]

**Science Outreach in the UG Curriculum**

We will show how outreach can be built into the UG curriculum, giving significant benefits to student and to local schools. CHEM390 and ENV393 are 15-credit modules where undergraduates learn about science communication and then prepare and deliver practical science workshops to local schools (primary and secondary). These modules develop students' skills (oral and written communication, project planning, team work) as well as making a contribution to the University's Access Agreement targets.
Jimmy Fan Zai Fu [Law, Singapore]

Adopting principles of Taichi in teaching: A Singapore story

In Singapore, we’re running a full time 3-year BA (Hons) programme in Criminology and Security. A unique feature of this degree programme is the rich mix of students that we have, with their ages mainly ranging from the early 20s to late 30s. Our undergraduates consist of fresh polytechnic and college graduates, as well as adult learners with years of work experience in policing and security-related professions. Some of the key challenges that I face in the seminars include, getting students engaged in seminar topics, assisting our students to develop critical thinking skills, creating a conducive environment for learning and dealing with reticent students. My sharing for this conference will be on the approaches and techniques that I’ve adopted for my seminars to address these issues.

Dr. Olivier Sykes, Dr. Urmila Jha Thakur, Dr. Karen Potter [Geography & Planning]

Internationalising the Curriculum in Professional Disciplines – some reflections on experiences, challenges and outcomes in the field of urban and environmental planning

The internationalisation of higher education and rise in international student mobility over recent decades has been accompanied by much reflection on the extent to which universities are equipping their students to be future world citizens or ‘world professionals’. At an institutional level the University of Liverpool’s (UoL) Internationalisation Strategy emphasises the need for graduates to have an “ability to operate in culturally diverse contexts” and the importance of “creating a distinctive and exciting learning environment for both international and UK students”. This presentation will reflect on how internationalisation of the curriculum in one area of the University’s teaching has sought to respond to these goals. Issues discussed will include the objectives of pursuing internationalisation, learning and teaching approaches adopted to further it, and experiences, challenges and outcomes for learners and teachers.

Dr James Wilson [Education Enhancement Centre, XJTLU]

Teaching v Learning Styles: Preparing Chinese students to be successful learners at the University of Liverpool

This presentation will explore Chinese students’ cultural and educational backgrounds with a view to highlighting the differences in their learning styles to that of a Western UK model for example, participation in group projects and active-independent learning, and the perceived lack of participation. The aim is to raise awareness of issues that Chinese students may be faced with at Liverpool as they adapt to these new approaches to teaching and learning and introduce some methodologies used at XJTLU to support their transition.
Cathy Fletcher and Cath Gordon [Health Sciences]

**Great Expectations: A study to compare and contrast the expectations of radiotherapy students with those of nursing students at the University of Liverpool and the reality of practice’**

The School of Health Sciences at the University of Liverpool delivers pre-registration programmes for the education of therapeutic radiographers and adult nurses. Literature would suggest that there is a need to generate a better understanding of the reasons why students choose to undertake the respective programmes but fail to complete their studies.

A qualitative design was selected to explore the expectations of therapeutic radiography students and nursing students. The aim of this study was to compare and contrast the academic, clinical and practical expectations of therapeutic radiography students and adult nursing students at the University of Liverpool with the realities of life as an undergraduate student on a healthcare programme.

A specifically designed questionnaire was distributed to the current year one students from both programmes during the first week of semester one. The questionnaire was scrutinised using the Miles and Huberman (1994) approach which has allowed the data to be reduced, displayed and themes identified.

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Ian Pierce-Hayes and Vicky Thornton [Nursing]

**The sorting hat versus interviews as part of the selection process in University applications**

This presentation seeks to look at the role of individual interviews as part of the selection process. Whilst, acknowledging interviews as a flawed process it will seek to demonstrate good practice in the first steps of engaging young people in to academia and acknowledging them as adults.

Health Education England launched a Values based recruitment framework in October 2014 to help ensure that by March 2015, all prospective students recruited to NHS funded education programmes are recruited for the values of the NHS constitution, such as respect and dignity in the care of patients.

This presentation will discuss the context of Values Based Recruitment and how it was implemented into the admissions process in the School of Health Sciences. It will hear from current students on their experiences of the process.

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Dr Pete Leftwick [Medical School]

**What’s all this nonsense about caring and empathy in medical school?**

From student selection, through medical school teaching and assessment and onto post-graduate appraisal and revalidation, we are increasingly requiring medical students (and doctors) to demonstrate that they care about their patients. The vast majority work conscientiously to care for their patients as well as they possibly can, but when home at the end of a day (and when the medical school and GMC aren’t looking!), how many do really care about their patients, and if they did what would be the consequences on their wellbeing as professionals? An ‘empathic’ doctor may be popular and score well on patient feedback surveys but in many situations it is either forced or false and there is increasing evidence that too much empathy can cloud judgement. This approach, which largely follows a populist agenda rather then one of academic rigour, amounts to little more than discrimination against the honest and those with less emotionally intelligent personalities, hinders the goal of widening access to medicine, gives students inappropriate and often unattainable aspirations and is detrimental to both patients and the medical profession as a whole. I propose it is time to review our obsession with teaching empathy.
Dr. John Jenkins and Ken Linkman [Library]

Reading Lists @ Liverpool: supporting curriculum change in Medicine

In Medicine, Reading Lists @ Liverpool has been found to be a useful tool for lecturers to organise material and help students navigate to the sources they need. The change from PBL to the new expert-led curriculum has led to new developments in list structure and content, enabling collaboration by multiple experts. John and Ken will show some of their reading lists and discuss how students are using them.

Dr. Pete Smith & Students [Dental School]

From us to you: The Utility and Utilisation of Learning Support Materials

In the dim and distant past a lecture was an ephemeral creation that vanished swiftly into the scrawled notes and vague recollections of those who actually attended the event. It has long been known that even the most perfect lecture may be distorted into unintelligibility by the filter of student consciousness and so the handout was born to provide a definitive summary of the intent of the lecturer [1,2]. Handouts have progressed from a few scribbled notes hastily photocopied to a few typed notes hastily uploaded to VITAL or have been replaced entirely by the lecturer’s PowerPoint slides or even by an audio or video recording of the whole thing. Technology has made it increasingly easy for academics to fulfil the requirement to provide learning support for their teaching with relatively little reflection on the extent to which these materials are useful or indeed used. Furthermore, the same technology has made it possible for students to create their own learning support materials (“anyone like to see my notes from last year?” [3]) and their own informal networks with which to share material.

We intend to engage the 1st BDS student cohort to determine the nature, availability and utility of learning support material including that which originated or is propagated outside of formal university channels.

A volunteer student focus group will audit and appraise available learning support materials and, on the basis of their observations, help to formulate a questionnaire with which to assess the utilisation of leaning support materials across the whole year group. The views of the student cohort will be sampled both during term time and the summative exam period. Data from the study will be analysed by members of the student focus group and used to inform the advice given to members of staff who contribute to the course and also to future 1st BDS students.

Dr. Nichola Street, Dr Alex Forsythe, Prof Ronan Reilly [Psychology]

Automated measuring of text complexity and cohesion

We report on an approach to automatically measure text cohesion and complexity using a combination of measures based on the concepts of surprisal (Hale, 2001) and latent semantic analysis (Landauer et al., 1998). The measures are derived from three main text sources: a subset of the Google book corpus (Michel et al., 2011), the Subtlex English subtitles database (Brysbaert & New, 2009) and graded Blackboard discussion threads. Our measures proved good predictors of reading difficulty and appear to be psychologically realistic measures of textual complexity. The results are discussed in regard to factors differentiating student performance in graded discussion threads.
In running a second year optional undergraduate module on Gender, Sexuality, and Music, I’ve found the subject has a certain appeal to students; the module tends to attract an enthusiastic core of students interested in exploring their own gendered experiences of music, and discussions in class are often informed by the popular cultural experiences of the group. However, I wanted to push beyond classroom discussion and try to shift students’ perspectives on the issue at a more fundamental, everyday level. I therefore decided to capitalise on the means by which their “real world” experiences are so often conducted, and incorporate digital tools into both week-to-week engagement and assessment. A class Facebook page and a module hashtag together facilitated the sharing of online examples from a variety of sources, and virtual discussion has continued since the module’s end. Online discourse was also a central concern of the second assignment, a critical article using www.storify.com to “curate” items from a range of online sources and social media. Through these tools, the module takes advantage of the students’ existing discourse networks to encourage the application of some notoriously abstruse theory to the digit(re)al world around them.

Dr Freya Jarman [Music]

Life in the digit(re)al world: from lecture room theory to everyday life through digital tools

Harry Anderson, Zelda Chatten, Dr Anna O’Connor [Guild; Library; academic colleagues]

What have we Learn(I)T? Digital Literacies: the student and the staff perspective

In this presentation, students from the Guild and staff members from the Working Group will give examples of how digital literacies are being used and how they impact on the student experience. We will focus on ideas that came up across the event series, including: using social media to develop professional networks and enhance employability, engaging with social features available in referencing tools, using metrics within powerful search tools to enhance finding information and how we can use technology to improve collaboration and workload management. One of the themes that have consistently arisen is the need to ensure that digital technologies are applied appropriately and in tandem with developing digital literacy to ensure they are relevant to the learning and teaching needs of staff and students.

Come and find out how you can include digital literacies within your teaching to develop student interaction and engagement and add value to existing methods.
Dr Alex Forsythe and Kirsty Jordan [Psychology]

Networking in the classroom; the determinants of perceived employability; social capital, mindset and resilience.

Here we examine the relationship between student self organisation and personal perceptions of employability. Social capital theory explains the relationships, attitudes and values that govern interactions among people. Social capital is known to provide informational, instrumental and emotional support as well as collective efficacy. Those with higher levels of social capital are most likely to be successful at gaining employment (Seibert et al, 2001; Higgins and Kram, 2001). It is hypothesised that students with higher levels of social capital will seek out self-organised learning environments and perceive themselves as more employable. Social capital will be mediated by higher levels of personal resilience and a growth Mindset.

Dr Laura Soulsby [Psychology]

Supporting undergraduates’ career development in Psychology

How do you engage students in understanding and reflecting on their employability, and preparing for their future career? In this talk, we reflect on the introduction of a Year One Psychology employability module and encourage discussion around how, and when, to engage undergraduate students in career planning.

Gerard Kelly [Law]

Curricular Redesign and the Role of Serendipity: A Legal Education Perspective

This presentation considers the conditions influencing curricular redesign. The contribution of serendipity is explored in the context of the unanticipated redesign of a Level 6 elective law module. Although responding to unexpected change is not uncommon in higher education, there remains a surprising dearth of research evaluating the potential contribution of serendipity in curricular redesign. This study uncovers a research agenda with themes concentrated on the role of serendipity in curricular design and the incorporation of ‘real world’ relevance (Fincher and Mander, 2001) into curricular redesign.
Cath Williams  [Radiography]

From doodles to NSS

A three year longitudinal study using adapted doodle polls in years 1 and 2 BScHons Diagnostic Radiography, as a formative training tool to enhance student understanding of the NSS questions. By April 2015 data following one cohort (2012) will be available for first pass evaluation and reporting and may be of interest at the T&L conference. All years take part in the doodle poll to include year three 2013 & 2014 cohorts, and a steady increase in NSS scores over the past three years have been noted.

Dr Simon Watmough  [Inst. Learning & Teaching]

What do the NSS scores tell us about what students want? Using the ILT as a case study

The research shows that there are generic themes emerging from what the students want are quite obvious from whatever course they graduate from, they want prompt feedback, emails responded to, support offered where needed and lectures/teaching sessions to go ahead as planned etc. It seems a small number of staff don’t respond to emails or won’t make lecture notes available and students remember this when completing their NSS questionnaire. By analysing the themes which emerge which from the qualitative positive and negative comments it is possible to triangulate these with the quantitative data so the qualitative comments can be used to explain the quantitative scores and be used as guidance for improving scores in the future.
Dave Wheatley [Guild of Students]

Skill Development through Participation with Green Guild

The Green Guild project has led to increased student participation in programmes associated with promoting sustainability both across the University and through partnership activities with local schools. The workshop encompasses the range of extra-curricular activities which are available including volunteering on the roof garden and bee keeping, promoting pro-sustainability behaviours through the Student Switch Off programme, leading on innovative ‘seed fund’ projects and supporting curriculum research in the context of education for sustainable development. The workshop will examine the impact involvement with these programmes has had on the individual skill development

Dr Karen Potter [Geography & Planning]

Enhancing Education for Sustainable Development through Collaboration

The Environmental Sustainability module (ENVS2018) is delivered by the Department of Geography and Planning (School of Environmental Sciences), incorporating both sustainability and interdisciplinarity across a large student cohort including planners, geographers, architects, economists and ecologists. In 2014 it included a focus on the University of Liverpool campus from a planning and development perspective. Brooks and Ryan (2008) stated that Education for Sustainable Development is as much about organisational and institutional learning as it is student learning, and furthermore both arenas of learning are involved and interdependent. Drawing upon UoL’s efforts at ‘Campus Greening’, the workshop explores how collaboration with other bodies such as the Green Guild Team can help overcome interdisciplinary pedagogical challenges and contribute towards innovative approaches that promote dialogue, problem posing and solving, teamwork and critical thinking.
Joanne Adeoye, Craig Murray [Health Sciences]

**Evaluation of changes to Clinical Placement Objective Setting**

We have recently changed the way we set objectives for students for clinical placement. We propose to seek feedback in the form of questionnaires & comments from clinical tutors from placement sites across the country and current 3rd year students in order to evaluate the impact these changes have had on the students learning experience whilst on clinical placement.

Bev Ball and First Year Students on BSc (Hons) [Radiotherapy]

**The value of service users in the preparedness of students for their first clinical practice placement**

The idea of creating opportunities for students to learn directly from people with experience of a service is not new and there have been significant, positive changes to the role of service users in health education. Radiotherapy programmes at the University of Liverpool have been incorporating users in a variety of ways since 2006. It is now a requirement of our statutory body as from September 2014 (HCPC, 2014).

Radiotherapy students visit a cancer support centre in semester 1 of their training. The aim of the visit being preparation for their first clinical placement. They get to experience a cancer support centre, services offered and the role of the centre in the community. This is just one of our approaches in radiotherapy that embraces service user and carer input and gives students a valuable insight into the kind of encounters they may have in the clinical environment.

Helen Orton [Health Sciences]

**Educational tools - Using theatre as an educational modality to teach health care professionals about disease.**

A longitudinal study to review the impact of using theatre to teach dementia. The presentation will report on the effectiveness of theatre and the change in attitudes of health care professional students towards people living with dementia.
Duncan Brown [CSD]

Stream Capture

Stream Capture is bespoke software written by CSD to provide lecture capture for the University of Liverpool. It is able to record desktops, webcams and microphones in different combinations to provide accurate recordings for Orbit timetabled lectures. It allows for the seamless integration with stream.liv.ac.uk, the University’s streaming media service and provides the automatic upload of lecture captures into relevant VITAL modules. In this presentation I will demonstrate the Stream Capture software, its principle features and its ease of use.

Dr David Jackson [Computer Sci]

The Connected Classroom

A problem with the conventional lecture-based approach to teaching is that it does not adequately promote interaction with students. There have been various technology-enhanced approaches to addressing this, most notably the ‘clicker’ style systems used to enable students to vote for one of a number of responses to a question set by the lecturer. I have attempted to take this a stage further by implementing a system for wi-fi based interaction in lectures, with students able to respond via their laptops, tablets or smartphones. This means that no specialised hardware is required. More importantly, the approach allows the lecturer to see exactly how individual students respond, to build up a picture of performance over time, and to provide targeted feedback to students. It also acts a basis for integration with other software tools, facilitating processes such as attendance monitoring and end-of-module feedback. The system has been trialled in my module taken by over 100 students, with virtually universal engagement and highly positive student reaction.

Dr Alex Balch [Politics]

The Politics of Audience Response

This presentation will discuss the use of Audience Response Systems in the teaching of social science. It will include an example where ‘clickers’ have been used in a politics module on the topic of immigration. Discussion will cover the potential benefits and pitfalls in using audience response technologies, and explain how the exercise was integrated into the module’s learning objectives.
Dr Jenny Newman [Veterinary Sci]
**Why are our students afraid of numbers, and what can we do about it?**

Practising medicine does not require mathematical genius. However, confidence and competence in handling numerical data, alongside an understanding of and ability to apply simple mathematical concepts, are essential to the safe practice of human and veterinary medicine.

Veterinary and medical students frequently find completing mathematical tasks challenging. This issue has been identified across disciplines and institutions, with educators and clinicians frequently encountering students who report that they cannot perform simple calculations, and avoid the need to do so by relying on peers with greater numerical confidence. This belief in their own inability likely further impedes acquisition of the required skills and confidence.

We will explore the challenges of facilitating mathematical confidence in our undergraduates from the perspective of both student and teacher.

Dr Gita Sedghi  [Chemistry]
**Tackling challenges of maths through entry requirement, teaching methods and assessment**

Our project to create online multiple choice maths questions with increasing complexity, quality formative feedback and grading to enhance student learning in maths in a chemistry context was funded by Sigma Mathematics. The rational for this project was to enhance students’ knowledge and skills in maths and to provide them various resources to practise this subject. Also, a combination of assessment techniques ensures validity, reliability and efficiency of an assessment system.

As a result of the addition of online assessments and the difficulties chemistry students had with maths, some changes were made to the delivery of the Year 1 maths module and the assessment system. The outcome of the evaluation of the new system will be presented and also students’ performance in maths and its relation with the A level entry requirements will be discussed.

The experience of engaging undergraduate students to develop new experiments for teaching labs, to produce pre lab activities and to facilitate peer assisted learning sessions in the Department of Chemistry has shown the importance of students’ involvement to enhancing teaching and learning activities. The new online assessments were created by senior undergraduate students and the levels of the tests were evaluated by Year 2 students before embedding into the course.
Dr Susanne Voelkel, Dr Andy Bates, Tunde Varga-Atkins, Dr I. Willis [Life Sciences; CLL]

How our students experience their first year at university

Two consecutive cohorts of first year students in the School of Life Sciences filled in a questionnaire halfway through their second semester (participation rate ~80%). The survey results give us a fascinating insight into the first year students’ mind set. For example, we found out that about 15% seriously considered leaving university within their first year, and why. They also told us that although most of them are happy with their chosen program of study, only half of them feel a strong sense of belonging to it. We learn what they think about their relationship with staff and other students, and what we can do to help them settle in. They revealed that on average they study independently for 3-5 hours per week, what motivates them to do it, and what we can do to encourage them to study more. They said what they want in terms of feedback and how we can support them better in their learning. Two focus groups provided even deeper insight into the reasons behind some of the answers. The results of this study are likely to have implications not just for the School of Life Sciences, but for all students across the University.

Dr Ulrike Bavendiek, Dr Rosalba Biasini, Ms Anke Bohm, [Modern Languages]

What do our students need to know? Identifying knowledge and skills to support successful transitions for language learners

The smooth transition from Sixth Form to University has long been recognised as important for student retention and attainment. It can be assumed that, due to their learning experiences in schools, students start their university studies with a diverse range of relevant knowledge and skills, which can help or hinder their progress.

The project presented in this paper was developed as part of an ongoing critical review of the languages curriculum and other language learning opportunities by the University’s Languages Teaching Team. It is based on interviews with first year students about their language learning experiences both in schools and during their first year in the Department of Modern Languages and Cultures. The interviews aim:

a) to identify the role of language awareness, which includes the knowledge about language and learning skills and strategies, for university language students in their first year of studies and

b) to identify strengths and weaknesses in the language awareness of incoming students.

The results of this small qualitative study will inspire and define the implementation of new support structures in the department. It is envisaged that an online resources toolkit for independent study will be developed in order to provide individualised learning opportunities for students struggling with selected, basic knowledge and skills relevant for language learners.

The project is supported by the Strategic Enhancement Programme of the Higher Education Academy.

Simon Snowden [Management School]

Troublesome 1st Years? A phenomenographic study of ways of experiencing learning in the transition from FE to HE

An examination of the results of a study of 1st year students studying Business Studies. Phenomenography is used to explore the variation in learning experience of these students at the end of this crucial period of study as they move into tertiary education. The findings provide an interesting take on their experience of the transition to HE from FE and how this interacted with their learning approaches. Using liminality as a theoretical lens this presentation would hope to take us beyond the student as a set of deficits debate and help look at study skills from a fresh perspective.
**Dr Ralf Weigel** [Tropical Medicine]

**Viva voce for postgraduate students at LSTM: a case report**

As part of a 30 credit module clinical Masters students work in small groups and peer assess their contributions. However, the module’s written exams focus mainly on memorising factual knowledge. We describe how we planned an oral exam and reflect on the assessment process that aims to test higher learning levels.

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**Dr Julian Ferraro** [English]

**Creative Assessment**

The presentation will focus on the adaptation exercise that forms part of the assessment of an English module on comics and pictorial narrative - ENGL362 Talking Pictures - in which students take a piece of text and adapt it to sequential pictorial form, and write a critical essay reflecting on the exercise.

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**Denis Duret & Dr Zeeshan Durrani** [Veterinary Science]

**Is PeerMark a useful tool for formative assessment of literature review? A trial in the School of Veterinary Science**

In the current curriculum, as part of a research skills exercise, second year veterinary undergraduate students have to submit a short literature review with appropriate reference style. In semester 1, as a part of formative assessment all students (n=156) were asked to submit their Literature Review via Turnitin. Each student had to review and critique two submissions of their peers. In general, the undergraduate students have very little experience of scientific writing and providing a constructive feedback to their peers. In the PeerMark, we therefore, asked students to provide constructive feedback by responding to both open ended and scaled questions. The students were also encouraged to make specific comments where necessary. In the second phase, course instructor reviewed the feedback from the students and added appropriate comments where necessary.
Dr Sergey Burdin, Dr Helen Vaughan & Dr Marco Palumbo [Physics]

**Dragon’s Den in the undergraduate lab.**

To introduce application writing skills and provide context for communication skills, a Dragon's Den style funding system has been introduced to enhance early year team projects. The short term projects have already allowed students to develop their own ideas for electronic devices and control systems and are perceived to be beneficial and “the best part of my degree so far”. Some of our more enterprising students found financial support for their devices from outside companies. Following their lead, the physics department has now created a small fund so all teams can, after the completion of the assessed work, bid for further funds that allow them to continue their work over summer and with the mentorship from a local company. The scheme will be run for the first time in 2015 and this presentation will focus on the set up and evaluation of the scheme and include contributions from students.

Dr Lesley Iwanejko [IACD]

**Centre for Integrated Research into Musculoskeletal Ageing (CIMA) MRes programme**

The CIMA MRes programme forms part of an MRC/Arthritis UK award to the University of Liverpool (which leads the Centre), the University of Sheffield and Newcastle University. The programme is delivered collaboratively between the three Universities and comprises 60 online subject specific credits (20 credits per University) along with a 120 credit research project/research skills module. The Liverpool team designed a module that taught key concepts and research techniques in muscle and tendon ageing whilst also developing skills relevant to a career in scientific research. I will provide a brief overview of the programme and some of the challenges we faced, before concentrating on our module, in particular how we were able to support the development of critical thinking and scientific communication skills in an online module. I will conclude with some of our ideas for the future of both the programme and the module.

Dr Rob Ashworth, Luca Stockhausen [Physics]

**Handing over the reins to post-graduate researchers (PGRs)**

Transferable skills training and exposure to industry are two of the principles for good practice set out by the EC for innovative doctoral training. Both of these principles were addressed by giving a cohort of PGRs the opportunity to organize their own European workshop. The PGRs were fellows from the LA3NET European training network which also provided strong support via the University’s EU Project TEAM that coordinate the network as a whole. Consequently, the Scientists Go Industry workshop was born, the brainchild of the LA3NET fellows with the aim to explore the future career options for post-doctoral level researchers outside of academia. Details of the organization and implementation of the event will be presented including the views from the fellows of the experience and lessons learnt.
Roanne Ephithite, Michael Breckenridge, Emma Nibbs [Guild of Students]

I am student, hear me roar! Student Representatives and the Enhancement Project
How is the new Code of Practice on Student Representation working? What have we learnt in its first year? We’ll be looking at the student-led Enhancement Projects that have come out of the Code of Practice, hearing from students who have run them this year, and what impact they’ve had on their department. Projects focus on a key issue as identified by students and their Head of Department which, if changed, would make a significant improvement to a student’s experience in a department.
Come and learn about this exciting new approach to student-led course enhancement, and the Guild’s innovative approach to student representation.

Dr G Schleyer, Dr T Bullough, Dr G Sedghi, A Mills, F Hill, S Corrigan, B Ross [Engineering]

Peer Assisted Learning (PAL) in the School of Engineering - Transfer of Good Practice
A PAL scheme was set up in the Department of Chemistry a couple of years ago by students and staff and proved to be successful. Last year some senior engineering students were interested in starting a PAL scheme in the School of Engineering. This presentation will highlight the process of transfer of good practice between departments and the experiences of the PAL team in setting up and running the scheme for engineering students which helps first year students adapt to their new academic environment but also helps to develop leadership skills and enhances the employability of senior students.

Dr James Gaynor [Chemistry]

Peer to peer feedback & interviews: Employability for final year BSc Chemists
Final year BSc Chemistry students undertake a whole year keys skills module (15 credits). Semester 1 focuses on employability with an underlying principle of peer-to-peer activities:

Peer-to-peer interviews: In groups, students are required to research and plan a 50 minute interview session which they then deliver to another group of their peers. The focus is the chemical industry and under the supervision of a tutor, each group devises a company name/description, job advert, feedback forms and assessment criteria for their ‘interview candidates’. The interview candidates then apply for the job via a personal statement with each student acting as both an interviewer and an interviewee during the process. The groups mark their candidates, evaluate the process and submit group reports.

Peer-to-peer feedback and reflection: On four occasions across the semester, students completed the following process:
1) Submit formative draft of a small piece of work
2) Peer review and leave peer feedback
3) Engage with feedback (and on two occasions make changes with resubmission for tutor assessment)
4) Complete a mini-reflection questionnaire about the process

Tutors either assessed the quality of the feedback students gave each other (point 2) or the quality of the re-submission (point 3).
Dr Ali Al Ataby [EEE]
The Vital VITAL
The presentation is about how to effectively use the University blackboard system (VITAL) for large cohorts in a way that students can find everything they need to support their learning experience. Although other tools will be used but the presentation shows how to combine these tools and make available under VITAL’s umbrella. The presentation will provide evidence and statistics about how VITAL becomes very important to the students when it has all what they need/expect.

Prof Peter Kinderman [Medicine]
From scepticism to enthusiasm: The story of a virginal MOOC
This presentation will describe the process of development of a new, free, on-line course for the general public (a MOOC). The course – “Psychology and Mental Health: Beyond Nature and Nurture” – was designed to give students new perspectives on the ‘nature vs nurture’ debate, help students understand the ways in which we are affected by life experiences and discuss new research which promises to help us improve our own mental health and well-being. This presentation will outline the practical steps towards the delivery of a successful educational product, and illustrate the evidence of that success. It will also describe the changing attitudes of the lead educator towards the project; from initial scepticism, through enthusiasm for the educational approach offered by on-line provision, to a desire to expand the provision of such courses to the field of continuing professional development. It will conclude with some ideas for how such CPD could be delivered in practice.

Anita Holt [Inst. Learning & Teaching]
Using web tools for teaching and learning
The internet provides a host of opportunities to support Teaching and Learning. There are lots of interactive websites, which are referred to as web tools, these allow users to interact and collaborate online. In this short session, I will be demonstrating Quizlet. People use Quizlet in a range of educational settings from primary schools to universities. Quizlet focuses on building basic learning capabilities for individuals. It offers a range of easy to create activities, which include flashcards, matching games, multiple choice tests, worksheets etc. It helps students with memorisation and recall of key concepts, and basic practice in everything from vocabulary to maths to language learning. It can help students remember spellings, definitions, test knowledge. It has a range of tools to suit many scenarios. It can also be easily embedded into VITAL courses. It is free and very easy to use.
Dr Maria Limniou, Dr Minna Lyons and Dr Ian Schermbrucker  [Psychology]

Traditional versus flipped teaching: An example from Psychology

In every module which has a face-to-face component, students may acquire knowledge before, during or after class, while teachers assist them to clarify and apply that knowledge during class. In the traditional way of teaching, students expect from their teachers to present them with a topic, while learning material might be assigned to students before and/or after their lecture. In a flipped class, students are specifically given access to learning material before class and must prepare themselves to participate in class activities. Teachers guide the process of feedback through discussions, collaboration among students and/or between students and experts, while at the same time they try to get through all the material using focused presentations on students’ specific questions. At the end of the lecture time, teachers provide additional explanations and resources to students so that students can continue applying their knowledge and skills after clarifications and feedback in the class process. In this investigation, we have studied what were the students’ views on traditional and flipped teaching and what difficulties teachers have faced by following either the traditional way or a more interactive way of teaching.

Dr Paula Harrison Woods  [Student Services]

Rethinking inclusive practice- supporting disabled students

This session will look at how changes to support funded by Disabled Students’ Allowance will impact on the University and will consider how some of the barriers experienced by disabled students can be removed by inclusive teaching and learning practises. Participants will be encouraged to share examples of good practice in their own areas and to identify areas for further development.

Dr Kate Hammond [Life Sciences]

‘Drinking like a fish’: Redesigning an introductory practical taken by a large, diverse group of first year Life Sciences students to increase relevance and engagement

It can be a huge challenge to design practical classes that effectively engage large, diverse groups of students. In the School of Life Sciences our introductory undergraduate practicals are one such case: There can be up to 400 first year students taking these practicals who come from programs ranging from Anatomy to Biochemistry to Zoology, and who also have very different levels of prior experience of practical classes. In the past a significant number of students have told us that they found the practicals irrelevant and that they sometimes struggled to cope because they didn’t feel prepared. With this in mind I completely redesigned the first practical that students take, incorporating a new locally relevant topic that has been in the news, enquiry based learning techniques, integration with other modules and a variety of on-line resources to help them prepare. This had positive results with the vast majority of students surveyed reporting that the new practical was relevant and interesting and that they were helped by the on-line resources.
Dr John Downes & Nikki Street [Psychology]

**Examining feedback quality and consistency**

On receiving marked coursework, students will confer with each other, and make comparisons of the feedback they receive, which can sometimes lead to complaints of inconsistency. This applies particularly to large module cohorts which necessarily require multiple markers. We report the results of a retrospective study using a feedback profiling tool to measure the different types of feedback received for a year 1 coursework essay, assessed by 20+ staff.

Avril Senior [Veterinary Sciences]

**How to improve student performance, engagement and feedback using Team-based Learning.**

Using Team-Based learning with integrated peer review we deliver a new curriculum that is valued by students. It trains them to think like professionals and to give and receive usable feedback at the same time.

It encourages engagement with the course through integration of subjects and application of theory into practice.

With two hours of staff time it generates over 1,700 pieces of individualised, personalised and, most importantly, recognised as ‘useful’ feedback to students.

Dr Ray Fewtrell, Dr Marina Anderson & Dr Jane Wilcock [Medicine]

**Improving communication and feedback among hospital educators: a two way process**

In response to the new curriculum changes at the School of Medicine and our poor NSS results we set up educator forums in hospital Trusts. This presentation discusses our early experience of these and the response of educators in hospitals to them, examining drivers and detractors to feedback and possible solutions.