

ARICO, Fabio and WATSON, Duncan (University of East Anglia, UK)

Promoting students' self-efficacy through audience response systems (Paper – Session 2A)

This paper details the initial developments of a teaching protocol aimed at increasing students' self-efficacy, defined as a student's self-confidence at performing academic tasks.

In the current climate of competition for the enhancement of teaching practice in HE, students run the risk of being placed 'at the heart of the system' in a passive way: more as receivers of a service, rather than primary actors and confident owners of their learning experience. In response, we argue that investment should be targeted at creating confident individuals, who are progressively autonomous in tackling academic tasks, and adequately prepared for the transition to their future career or studies. Our approach makes intense use of Audience Response Systems (ARS). In particular, we employ ARS devices: (i) to assess the student's ability at performing a task, and (ii) to collect feedback on the student's confidence at delivering a good performance. This allows us to compare objective and subjective evaluation of a student's performance, and to devise opportune responses that consolidate learning and that increase the student's self-efficacy at the same time. There is a dearth of evidence into the promotion of self-efficacy. Our preliminary analysis adds to this literature and opens up further evidence-based opportunities.



BALDER, Erik (University of Utrecht, Netherlands)

Using economic contexts to advance in mathematics (Paper – Session 2B)

The mathematical skills that many graduate schools in Economics require go beyond what is on offer at the undergraduate level in Economics. Therefore it makes sense for motivated undergraduates to start filling this gap in their senior year.

The paper to be presented (a companion book is in the making) explains how, within the context of one coherent course on topics in Economics, a variety of skills, as required in linear algebra, advanced and vector calculus, convex analysis and optimization, can be taught to such students.

These skills are both conceptual and computational, and are developed within the contexts of fitting data (least squares method), arbitrage pricing of financial derivatives (for a discrete probability space) and microeconomics. The course leaves optional room for some training in mathematical reason and proof.

Next to the well-known advantages that contextual learning of mathematics can offer, such a single course achieves considerable economy of means for the motivated undergraduate student.



BALKENBORG, Dieter and MILLER, Tim (University of Exeter, UK) **Teaching bank runs with classroom experiments** (Workshop – Session 6B)

We present the Bank Run teaching experiment, which demonstrates the Diamond-Dybvig (1983) model. It is one of the most versatile experiments provided online by the FEELE lab and can be used in many different economic modules. We explain the experiment in this session and thereby illustrate how to access and use the FEELE online resource for economic classroom experiments.



BECKER, Ralf (University of Manchester, UK) **Dos and don'ts of classroom inversion** (Paper – Session 5A)

Inspired by the technical possibilities of uploading online teaching videos I have been implementing Classroom Inversion for my quantitative course units (Statistics and Econometrics). Students are given a question set and worked online solution videos a few days prior to the actual tutorial/exercise class meeting. This offering will to a large extend already replace the "traditional" tutorial in which students merely copy solutions to questions. In the actual tutorial meetings students will be given unseen questions which they are to solve in small groups. The teaching assistant will merely check on students' progress, confirm the correctness of their solutions or attempt to set them on the right path in case they get stuck.

My experience with this setup is overwhelmingly good. Student questionnaires confirm that students believe that this new setup contributes positively to their learning. However, there are also a number of important lessons I have learned. Small differences in the setup can be crucial for the success of the scheme.



BECKER, Ralf (University of Manchester, UK)

What is class contact for? (Workshop – Session 6B)

What part of our teaching should happen in the classroom? The rise of MOOCS and the consideration of flipped classrooms are but two recent developments that make us question what class contact is actually good for. Or in other words, what should we do in classes that cannot be delivered in a better and more flexible way through online platforms.

The answer to these questions may well depend on the particular disciplines taught. My perspective is that of an econometrician. Be careful! Thinking about the above question may lead to a radical re-evaluation of your teaching practices.

In my personal practice I have radically changed what I do in tutorial/exercise classes and I and students are reasonably happy that the practice of flipped classrooms (carefully implemented) works well. The story is somewhat different though with big classes (in my case up to 300 students).

I would like to encourage participants of this workshop to think radically about whether we need big classes at all and if we do, what we should do in them.



BIRDI, Alvin (Economics Network / University of Bristol, UK)

The Economics Network collaborative research project on student expectations and behaviour (Workshop – Session 4D)

This session will be a presentation of the initial aggregate results from the EN collaborative research project, which set out to investigate whether there has been any change in student expectations and behaviour as a response to recent changes in higher education, in particular, the increase in tuition fees. The Economics Network has surveyed 3,483 students from 17 UK universities as the first phase of its study which will conclude with a repeat survey in 2014. The students surveyed were first and second year students on economics programmes who are distinguished by the large discrepancy in the fees they are paying; in most cases the difference in fees is £6000 per annum.



CANNON, Edmund (University of Bristol, UK) **Feedback and formative assessment** (Paper – Session 2A)

The UK higher education system has traditionally been characterised by students submitting work for formative assessment within small-group teaching sessions (e.g. classes of ten-twenty students). Such work is (or should be) marked and returned with comments. Combined with group-level sessions such as exercise lectures, the comments on students' work constitutes feedback. The perceived importance of feedback is illustrated by the fact that three of the 22 questions in the National Student Survey are on the quality of feedback.

Despite this, however, there is only limited evidence on the role of feedback and there are often claims in the press (e.g. the THES) that many students do not bother to collect marked work or fail to make use of the comments that they receive. Unfortunately it is not clear whether this is genuinely a problem or why students might fail to use feedback.

To address this issue, I analyse the quantity and composition of marked work that students do not collect within the School of EFM at the University of Bristol. Within the School of EFM, many tutors return work via the administrative office and this office retains uncollected work until the end of the academic year. I have a detailed database of anonymised uncollected work over several years. The amount of uncollected work is high. Analysing these data provides a foundation for determining strategies to ensure that students benefit more from the feedback that tutors provide.



CLEMENT, Ellie (University of Bradford, UK)

Plagiarism avoidance for new students: an economics case study at the University of Bradford (Poster) Co-author(s): Adelina Lees (University of Bradford)

Background: Rigorous processes were introduced at University of Bradford in 2008 to reduce the number of reported plagiarism cases. It became apparent that a significant number of cases were due to ignorance of what plagiarism was rather than deliberate cheating. An interactive resource The Plagiarism Avoidance for New Students (PANS) was created for roll out 2011-12 academic year following recommendation from the Senate Learning and Teaching Committee.

Approach: The PANS activities, hosted in the Study Skills module in the VLE constituted 5 learning objects and a 10 question multiple choice test. This was embedded into year 1 economics courses, introduced in taught sessions and completed in directed study. The PANS includes information on plagiarism and how to avoid it, as well as citing and referencing sources.

Results: Since students started completing the PANS before their first assessment the incidents of suspected plagiarism were reduced to around 1/5 of their previous levels. It has also been possible to better identify and track students who were in danger of failing to meet the required academic standards.

Conclusions/ Future work: Current available evidence confirms that the early intervention has succeeded in improving knowledge of plagiarism and referencing. Future work includes increasing support throughout the first year, and developing more formative learning objects which further develop study skills to build learner autonomy.



COOK, Steven (Swansea University, UK), **WATSON, Duncan** and **ARICO, Fabio** (University of East Anglia, UK) *Promoting pluralism: syllabus versus assessment* (Paper – Session 4C)

Contest and controversy; orthodox and heterodox; critique and reject: how can an intermediate economics module be adjusted to illustrate the multiplicity of, frequently antagonistic, explanations for observed economic phenomena? This session explores one quest inspired by the pursuit of this noble aim. Prompted by a simple question, 'how can the breadth of the syllabus be maintained and different theoretical approaches be accommodated?' it commences with an appraisal of the application of 'flipping the classroom' techniques. This application uses a combination of videos and storyline lectures to generate a more confrontational approach that shifts the syllabus away from the traditional 'toxic' textbook. The pitfalls associated with this approach are examined and it is proposed that pluralism can only be fully attained through the introduction of innovative assessment methods. Specifically, this session promotes the possibilities and opportunities offered by peer-review across academic disciplines. Arguably underutilised, peer review can actually provide lucrative pathways for mutual exchange of compatible knowledge across disciplines. Facilitating a trading of perspectives, this method of assessment is designed to facilitate 'feed-forward' whereby students share drafts of their work and discuss ways for improvement prior to submission. The proposed development of a pluralist approach to learning, places the students themselves at the forefront of re-shaping their learning experience.



CORTINHAS, Carlos (University of Exeter, UK)

Engaging and motivating students: using technology-enhanced learning experiences (Workshop – Session 2C)

This demonstration session will focus on our practical experience of meeting the challenges of engaging and motivating large internationalised student cohorts across a variety of subjects. Over the past few years we have integrated a range of technologies within our teaching across all 4 subject departments. We have experienced a very rapid growth in both student numbers (1st year modules of 500+) and the extent of internationalisation. The modules that we use to demonstrate range from quantitative & statistics courses, through theory of management, accounting, economic principles to global policy issues. We use technologies in a variety of contexts: from delivery of lectures to smaller tutorial groups; also both formatively and summatively to provide some assessment and feedback; we address therefore several conference themes. We have a 'toolkit' of technologies in current use and intend to respond to demand from participants on the day so we can custom make our demonstrations to meet the concrete needs of our audience.

Examples include:

• Echo360 (Lecture capture and streaming system); Computer aided assessment (e-assessment); Online marking and feedback (Turnitin, Grademark and PeerMark); Audience Response Systems (or "clickers"); Use of Smartphones for learning (ResponseWare); Social Media and Collaborative Working (e.g. Wikis, the Hive, Prezi, etc); Screencasts and podcasts (using Adobe Captivate); Turnitin, Grademark and PeerMark (assessment and feedback)

We are also attempting to integrate students learning across courses as well as between academic, extra-curricular and other informal learning opportunities. This session will be an opportunity to share our experience with other participants and have a critical debate on the pros and cons of the use of technology in the classroom.



CORTINHAS, Carlos (University of Exeter, UK)

Is formative homework a total waste of time? An empirical investigation (Paper – Session 1B)

Early results from a sample of 525 first years, introduction to statistics module show some interesting facts: Formative homework is definitely not a waste of time as it was found to statistically significant in explaining differences in the exam grade. Furthermore, exam grade differences are not explained in terms of gender or degree. Significant differences in exam results were found in terms of prior ability (as measured by the existence of A-Level Maths) and Age. Finally, an interesting result was that significant differences in homework completion were found in terms of nationality (UK-based students complete a lot more (voluntary) homework tasks than non UK-based students, possibly as a result of the A-Level system).



DAVIES, Peter (University of Birmingham, UK), **GUEST, Ross** (Griffith University, Australia), **MCCAUSLAND, David** (University of Aberdeen, UK) and **BOSSHARDT, William** (Florida Atlantic University)

Publishing in economics education: workshop with the editors of the International Review of Economics Education (Workshop – Session 4D)

We will provide a workshop discussion on publishing in economics education with particular reference to the International Review of Economics Education. The workshop will Include (i) a brief overview of some key topics which attracting interesting in economics education; (ii) editorial priorities for IREE (iii) key issues in the review process; (iv) special issues. The workshop will take the form of a discussion following very brief presentations.



DESNITSKAYA, Valentina (St Petersburg University of Finance and Economy, Russia) *Using multiple choice tests in students' self-studies* (Poster)

The importance of independent self study is increasing. There are many reasons for this, for example:

- The heterogeneity of students creates a situation where some must engage in extra learning to keep up with others.
- Distance learning based on self study.
- Importance of research work.

I have developed a series of interactive tests in the educational computer-based platform Dokeos for the course "Mathematical Models in Finance" in the joint Russian-French Master program "Corporate Finance, Control and Risks".

If a student chooses the wrong answer, the program offers auxiliary problems and/or a review of some topics in theory. If the student fails to solve these auxiliary problems, the program offers problems that are still easier and so on.



DIEDRICH, Martin (Frankfurt School of Finance and Management, Germany) **Enhancing student learning through programme coherence** (Paper – Session 3A)

Students learn faster and deeper if the many individual activities of their chosen study programme mutually enforce each other within an identifiable common learning environment. This relates to all aspects of the student's learning experience in the programme: curriculum content (topics in the right sequence, no unnecessary overlaps); learning & assessment methods (a good mix of different methods with a clear role for each); materials (varied but not chaotic); social (formation of a supportive cohort); and so on. By creating programmes that each have a clearly recognisable profile in terms of content and activities, the university makes it easier for students to choose the right programme and to benefit from that programme.

While the last twenty years have seen a great deal of movement toward greater formal coherence in a programme, say by imposing standardised module outlines, many of the deeper issues are often not addressed. This paper explores various ways of increasing programme coherence in a meaningful, lasting manner that recognises and celebrates the diversity of the participating lecturers and students. These reflections are based on the author's work as a practising university teacher and programme director in a wide range of HE intuitions in the UK and in Germany.

Topics addressed in the paper include: limitations of the "pick & mix" approach to module structures; how to use existing local teaching traditions in programme design; reconciling deep learning with detailed external demands on the syllabus; how to manage the change process.



DOORNEBOS-KLARENBEEK, Dorien (Fontys University of Applied Sciences, Netherlands) **Learning research skills** (Poster)

Practical research should be something 'natural' to professorship (Van der Linden, 2012) and should be reflected in a competent teacher (De Groof et al, 2012). It is a challenge to train teachers to become competent in the practice of research. In an ideal situation students should from the first year be familiarized with research skills (Geerdink, 2010).

In the first half year, students receive a research assignment. For this assignment students search sources, judge the reliability of sources and make a summary. The poster outlines the results of this in terms of research skills learned and knowledge gained.

ECONOMICS NETWORK (UK)

The Economics Network interdepartmental research project on students' expectations and behaviour (Poster)

See abstract above under "Birdi, Alvin".



ELLIOTT, Caroline (Lancaster University, UK)

Evaluating the benefits of lecture capture using a revealed preference approach (Paper – Session 5A)

Co-author(s): David Neal (Lancaster University)

The use of lecture capture technology to record lectures and seminars has become increasingly common in recent years. This paper discusses its introduction on a very large first year undergraduate Economics module. Lectures were recorded using a software based lecture capture system, with the recordings available to students on their virtual learning environment, typically within a day of the lecture being given. The paper discusses student feedback on the technology as gleaned from survey responses. This feedback includes student evaluations that were solicited on the virtual learning environment, but also unsolicited and offered without prompt by students completing lecture feedback questionnaires. This avoids the concern that survey respondents may overstate their demand for a product or service when asked to value it. However, the principal contribution of the paper is to evaluate the lecture capture technology using a revealed preference approach that has not been used in the academic literature to date. Data indicates the number of distinct students on the module who have watched the lecture recordings, but also indicates the frequency with which they have watched the recordings, and the average length of viewings. Further, we have monitored the viewings of the recordings over the academic year, and can identify 'spikes' in the number of viewings in the days before module tests.

Consequently, we can analyse the data to assess accurately the extent to which students use the lecture recordings, and also how and when they watch the recordings.



FLANNERY, Darragh (University of Limerick, Ireland)

Exploring preference heterogeneity for assignment systems across universities: results from a discrete choice experiment (Paper – Session 4C)

Co-author(s): Brendan Kennelly, Edel Doherty and Stephen Hynes (National University of Ireland Galway) and John Considine (University College Cork, Ireland)

Data from a discrete choice experiment is used to explore preference heterogeneity associated with assignment systems between students in three universities in Ireland. The motivation for the study arises from recent technological advances which have led to a significant increase in the use of online assignment systems in disciplines such as economics and statistics. Despite this, little research exists to understand student preferences for online assignment systems and whether similarities emerge between students across universities. To investigate this issue, we employ latent class and random parameters logit models to explore both observed and unobserved heterogeneity in students' tastes. Our findings reveal that significant heterogeneity in preferences is evident within and between students across the universities. We further employ a best-worst methodology with the data to provide some robustness to our earlier results and provide some insight into the least preferred and most preferred attributes of assignment systems from the student perspective. The implications of these findings for the design of assignment systems are discussed.



FREIRE, Tiago (Xi'an Jiaotong-Liverpool University, China) **New approaches to essay writing in economics** (Paper – Session 6A)

Co-author(s): Li JingPing (Xi'an Jiaotong-Liverpool University)

Instructors are increasingly recognising the importance of written assignments in economics. However, according to Becker and Watts (1996), in the US, only 23% of instructors require term papers in upper-level courses, and only 11% of instructors require shorter papers. Hansen (1998) lists three reasons that could explain this trend: (i) increasing time demands on faculty time; (ii) low quality of student writing; and (iii) most instructors are not confident writers themselves makes them reluctant to set their own weak standards on their own students.

In this paper we propose changes to the traditional essay assignment, which not only address the issues above, but also enhances student engagement and helps students develop more skills. We focus on a Development Economics course which we taught at the National University of Singapore, but our ideas are easily extendable to other courses. We propose splitting an essay assignment into two parts. The first part consists of creating a new or adding to an existing Wikipedia entry. The second part of the assignment consists of a proposal to create either a new Social Enterprise or Non-Governmental Organisation (NGO). We will also show through the results from an end of the semester survey that this assignment does a better job not only at developing the five skills Hansen (1986) argues students should exhibit but also addresses the problems mentioned above.



GIRARDI, Gherardo (London Metropolitan University, UK) *Incorporating altruism in the economics syllabus* (Paper – Session 4B)

Co-author(s): Luca Sandona (University of Verona, Italy)

There is a considerable body of evidence indicating that genuine sociality is a fundamental determinant of self-reported happiness (Bruni (2010)). Given that this empirical regularity is well established in the literature, it seems reasonable to incorporate in the economics syllabus this and other robust, related findings at the intersection of economics, psychology and sociology. This is a pedagogical process which has recently started, with a few textbooks coming into circulation which have taken up the task at hand, such as Becchetti, Bruni and Zamagni (2010) and, to a lesser extent, Massey (2008).

By conducting a survey among students, the authors wish to explore whether there is a "demand" on the part of the students for genuine sociality to be included in the syllabus. In addition we ask students if they wish to incorporate in the syllabus activities designed to practice and promote generosity, both in the classroom (e.g. through specially designed assignments) and outside (e.g. through volunteering) - an approach known in the teaching and learning literature as 'service-learning' (Bamber (2011).

The study has been successfully piloted in the UK (n=20). The authors expect to receive 100+ responses from students in the UK and 500+ in Italy, making it possible to identify any differences in attitudes across countries.



GUEST, Jon (Coventry University, UK)

Using short classroom games as a means of improving student engagement and learning (Workshop – Session 5C)

A number of different methods can be used to help promote a more active learning environment. One approach that appears to be growing in popularity is the use of short classroom games. These games are often simplified versions of economic laboratory experiments that have been utilised to generate data for research projects.

By taking part in these games, students get to interact with the course content and experience the impact of incentives at first hand. They can reflect on their own behaviour as well as that of their classmates. Subsequent questions/exercises can be used to help the students develop an understanding of the game they have played and the theory it was trying to test.

This workshop will demonstrate a number of these short classroom experiments that the author has introduced across a range of different economics modules. After a short introduction, the majority of the session will involve the audience taking part in a number of games in order to (1) demonstrate the active learning experience of the student and (2) the input and role of the tutor.

The workshop will finish with some discussion about the role that short classroom games may play in teaching and how the learning benefits from using them can be maximised. Reference will be made throughout to relevant empirical work that has attempted to quantify the impact of using the games on student learning.



GUEST, Jon and REIGLER, Robert (Coventry University, UK)

An analysis of the factors that determine the self-assessment skills of undergraduate economics students (Paper – Session 2A)

Research findings in the educational literature suggest that quality feedback is one of the most important determinants of student learning (Hattie et al., 1996; Black and William, 1998; Hattie and Jaeger, 1998). Unfortunately evidence suggests that students rarely seem to act upon the feedback provided by tutors (Carless, 2006). Sadler (1989) argues that in order for them to engage with feedback effectively they must have the ability to formatively self-assess their own work. Gibbs (1995) contends that most undergraduates lack these skills when they enter higher education and need to be provided with opportunities to improve them.

This paper contributes to the empirical literature on formative self-assessment by analysing data collected from first and second year students on a single honours economics degree programme at a UK university. Building on some of the key findings identified in the empirical literature by Falchikov and Boud (1989), the research tests the relationship between the precision of the student's self- assessment skills and factors such as gender, academic ability, and prior learning experience. Another important issue examined is the extent to which these skills both improve within and between academic years. In an attempt to improve the reliability of the data, students were given a 'mark' incentive to produce accurate evaluations of their own work. Results from some qualitative research carried out to assess the impact of this incentive will be reported. Finally some implications of these results for teaching and learning strategies in economics departments are also discussed.



HEDGES, Mary (University of Auckland, New Zealand)

What determines students' choice of elective modules? (Paper – Session 1B)

Co-author(s): Gail Pacheco (Auckland University of Technology) and Don Webber (University of the West of England)

Prior literature emphasises supply side issues concerning the modularisation of university programmes such as curricula issues and enhanced learning opportunities. Comparatively little is known about the demand side, such as why students choose specific modules. This article presents an investigation that was specifically designed to improve understanding of the factors that contribute to student module choices and draws on a large primary dataset comprised of students following a wide range of majors at a new university business school.



HEDGES, Philip (University of Westminster, UK)

Student choices of topic areas: what can we learn? (Paper – Session 1B)

Co-author(s): Peter Urwin (University of Westminster)

We intend to assemble and present the incidence of particular topics chosen by Economics Masters students since 2009 for their viva voce exams to understand what topics are likely to appeal to students and to suggest reasons for why these topics are popular and why some topics are never chosen by students. This information can be used to develop curriculum content.

Our Masters students are mostly international and we see their proactive choice of topic as an effective means of reflecting their particular needs and as a way of engaging/motivating them to develop their own curricula. The benefits of "self-ownership" will be explored to evaluate whether students achieve better results on average in self-chosen assessments versus more traditional prescribed assessments.



HOFFLER, Jan (University of Gottingen, Germany)

Teaching replication in quantitative empirical economics (Paper – Session 3B)

In empirical economics, a twofold lack of incentives leads to chronic problems with replicability. For authors of empirical studies providing replicable material is not rewarded.

We set up a wiki project for documenting the results of our replications as well as those found in the literature. In our database, we provide information about more than 1500 empirical studies, especially with regards to the availability of material for their replication. Regularly professors want to include examples from the recent literature in their teaching but find it too time consuming to identify appropriate studies. By giving access to our database and to our instruction manual we could already convince several other faculties to join our project.

We build the basis for the first replicable review paper on replicability as we give account of which studies were tested and which results were found in each case. We identified two main problems: First, not all published results can be obtained from the replication material provided. Second, information about how the used data were obtained from the raw data is hardly ever sufficient.



JIMENEZ MUNOZ, Antonio (University of Oviedo, Spain)

A CLIL research project in economics education (Paper – Session 4B)

Co-author(s): Nuria Hernandez Nanclares (University of Oviedo)

This paper outlines an educational research project in the 1st-year, 2nd-semester English-taught module "World Economy" within the Degree in Business Administration and Economics at the University of Oviedo, Spain. The project considers the feasibility of improving technical English while studying an economic bilingual degree without compromising content.

We look at two major strategies: first, planning educational interventions that would help overcome detected language problems, devising tactics and content materials to improve students' learning and performance. Secondly, designing the way to evaluate the research and determine the success of these interventions. The instructional methodology is set within the context of CLIL – Content and Language Integrated Learning – and full language immersion; it is formally done by team-teaching, combining a non-native specialist, an Economics-versed native speaker of English, and an ESL linguist.

Several ways to evaluate the research and measure their results are planned. First, analysing students' individual linguistic performance, which is controlled throughout the semester via class video-recording and written assessments, and determining progress as per CEFR skills. Secondly, qualifying student self-perceived effects of these interventions on their learning via surveys and interviews; this self-perception will be checked against language-based progress and academic results. Thirdly, the hard-data academic results of the students will be weighed against the results of two control groups: other Spanish-taught students in a parallel cohort taking the same exam, and a previous English-taught cohort who were not subject to these educational interventions.



JIMENEZ MUNOZ, Antonio (University of Oviedo, Spain)

Patients vs. patents: discussion skills in a bilingual economics course (Poster)

Co-author(s): Nuria Hernandez Nanclares (University of Oviedo)

First year students at the Faculty of Economics at Universidad de Oviedo (Spain) follow a World Economy module which is devoted to aspects of international trade and finance. English is the language of instruction, as it is in all bilingual curricular programmes within the University. A Content and Language Integrated Learning (CLIL) approach is followed for the module, which means that content and necessary language skills go hand in hand. This is supplemented with team teaching (native and non-native lecturers). One of our aims is to encourage low-confidence, A2-level students to speak in English and be able to contribute to tasks. To promote discussion skills between the students, we have organized a debate about medicine patents and the WTO intellectual property regulations (TRIPS). The activity has three differentiated stages. First, language training using module content already seen in class, as we review in small tutorial groups the most important words, phrases and vocabulary usually used in a debate. Lecturers offer models, attitudes and skills for debating, which then the students by simulating a debate situation. In the second stage, after researching on some material related with medical products patents, the WTO regulations and the approaches to this topic of Pharmaceuticals and NGOs, students do a 90-min debate about the given topic following a blowfish structure. The final stage wraps up the debate through an online forum where the students pose further questions about what has been discussed.



JUNGE, Cornelia (University of Abertay Dundee, UK)

Group work as a means of developing graduate attributes at different levels of study (Paper – Session 1A)

This paper outlines the possible use of group work at different levels of undergraduate study as a way to foster the development of "graduate" attributes in students. It examines the how group work in economics modules can be used to enable "deep" learning, and what the different requirement for its design are at different levels of study. Students of economics often perceive the subject as very dry, given the often abstract nature of the material taught. By exposing them to specific applications of previously taught theory, working in groups – both in the form of formative and summative assessment, students can semi-independently experience "real" economics and shape their own work. This encourages them to question theories and traditional thinking, actively create output that they identify with, and arrive at solutions through collaborative enquiry.

However, group activities are most commonly designed to promote primarily students' interpersonal working skills. As this work shows, students at different levels of their programmes perceive the challenges to and impact on their skills very differently when working in groups is concerned. Over the academic session 2011/12, economics students at stages 1, 3 and 4 were exposed to similar group exercises (within the constraints of the module descriptors) to evaluate their perception of the relative weight given to the university's "graduate attributes" within the exercise. Somewhat surprisingly, no group thought that the development of collaborative capabilities was the most important part of their experience.



LAWTON, Christopher and **GARRATT, Dean** (Nottingham Trent University, UK) *Employability for economics students: using evidence of employer skills needs to inform teaching* (Paper – Session 6A)

This paper will critically reflect on the authors' experiences of designing and delivering an employability module for third year economics students at Nottingham Trent University. Economic techniques and survey evidence were used to identify 'employer skills needs', which informed the learning outcomes for a group consultancy assessment. This required students to select and then apply economic theory and approaches from across their degree course to a 'real-world' problem - presented as a client's specification. This paper will also discuss definitions and applications of the term 'employability' and whether the associated skills are more usefully seen as core outcomes of an economics degree, as opposed to being taught as non-subject specific transferable skills. This discussion will be informed by student and peer feedback, given the 2012-13 delivery of this module included discipline specific economics content within an institution-wide parent module focussed on 'transferable' employability skills aimed at third years in all courses.



LIENING, Andreas (Dortmund University, Germany)

The entrepreneurship school: a new approach in fostering students' employability (Paper – Session 3D) Co-author(s): Ronald Kriedel (Dortmund University)

Current scientific discussion offers an interesting and very promising alternative to traditional concepts of enhancing employability. The new approach of the Entrepreneurship School is grounded in the theories of complex systems, especially self-organisation (synergetic) and the new emerging theoretical perspectives of entrepreneurial thinking - like effectuation.

The newly designed methods are based on the following didactical design:

"Obtaining Knowledge": The participants acquire the theoretical foundations of entrepreneurship through case studies and interactive multimedia learning materials in lectures and seminars.

"Carry out a Conversation": Experienced experts and founders are invited in order to give the students a first-hand insight of practical processes in Entrepreneurship.

"Self-Experiences": An internet-based business game gives students the opportunity to assume the role of an Entrepreneur in a realistic and complex, but simulated environment.



LIENING, Andreas (Dortmund University, Germany)

The junior business school: application of games, experiments and simulations (Poster)

We observe substantial deficits regarding economic thinking and acting, as well as economic cultural techniques and skills, within our society. Since pupils of grammar and comprehensive schools do not have the urge to make decisions on whether to start professional training, respectively an apprenticeship or to go to university, they represent a special target group. But school curricula are overfilled and only few teachers are trained to implement business education.

One solution is to implement additional education through a blended learning approach with learning at school, at home, in small groups at school or via the internet, and individual learning. Here, self-organization which underlies market-based concepts is acquired methodically. The incentive-compatible learning methods ensure a "homomorphy" between method and topic. Methods such as "anchored instruction", "cognitive apprenticeship", and "communities of practice" are used for this purpose.

The practical result of these suggestions is the 'Junior Business School' (JBS). It uses a variety of didactical materials based on new media and practical workshops. Young people are enabled to handle business questions and develop entrepreneurial thinking. University students are involved in the JBS and have the opportunity to learn for instance, new teaching methods, the use of games, how to implement online-tutoring, experiments, and simulations.



MALLETT, Jacky (Reykjavik University, Iceland)

Threadneedle: a simulation framework for exploring the behaviour of modern banking systems (Paper – Session 3B)

Of the many problems being faced during this extended period of financial instability, one in particular is pedagogical. How do we teach the operation of what is a socially critical, but also highly complex banking system embedded in a complex network of contractual financial relationships? Since the banking system is fundamentally based on a set of well-defined operations, its operations are eminently suited to computer simulation. In order to assist in its teaching and analysis we have developed a bank system simulation framework based on a full double entry book keeping implementation of the key operations of banking, including support for loan default handling, a variety of credit instruments (fixed rate, variable rate loans), inter-bank and central bank operations, and securitized loans (MBS, ABS).

This approach allows a more nuanced understanding of the "money out of thin air' aspects of the system to be developed, as the results of both deposit creation through lending, and deposit removal through loan repayment and default can be seen simultaneously. It also allows the impact of changes to the banking regulatory framework to be explored independently and compared with one another using experiments with identical mixes of banks and borrowers. By presenting students with a tool to explore the banking system as a system of inter-working components, rather than separate identities, and by building a detailed appreciation of its micro-structure, we believe that Threadneedle can provide a useful teaching tool for understanding and exploring the multiple sources of instability inherent in the banking system.



MALONEY, John (University of Exeter, UK) Learning the history of economics (Paper – Session 4A)

Students who learn about the history of economics (a designation which I prefer to history of economic thought) can:

- 1. Assess not just the answers to economic questions, but the worth of the questions themselves which have been asked over the centuries. In that way they can decide what kind of economics interest them and what kind of economists they want to become.
- 2. learn some economic history along the way and, in particular, learn about the history of economic policy, which economic history courses 'as such' sometimes sideline in favour of development and industrial organisation issues.
- 3. better understand contemporary doctrines by understanding where they come from and how and why they were built up in the way they were.
- 4. think about the role of ideology in economics, and thus escape the traps of thinking that it is all about ideology and of thinking that it has nothing to do with ideology.

In addition, while the history of economics is not the only way to introduce alternatives to 'mainstream' economics, it is the best way to understand why they did not become mainstream themselves.

Once these objectives are accepted, the structure and much of the content of the course are very considerably determined.



MEARMAN, Andrew (University of the West of England, UK) **How should economics curricula be evaluated?** (Paper – Session 3C)

This paper explores the evaluation of economics curricula. It argues that the dominant approach in economics education, experimentalism, has serious limitations which render it an unsuitable evaluation method in some cases. The arguments against experimentalism are practical, ethical and also rest on a view of the world as a complex, open system in which contexts are unique and generalised regularities are unlikely. In such an environment, as often found in educational contexts, alternative methods are advisable, at least as part of a suite of approaches in a realistic, case-based, mixed-methods approach to evaluation. Thus, economics curricula should be evaluated using a method or set of methods most appropriate to the particular object case. As such, there is no single answer to the question posed.



MEARMAN, Andrew and RAHMAN, Tanzila (University of the West of England, UK)

Understanding student attendance in business schools: an exploratory study (Paper – Session 4B)

Co-author(s): Gail Pacheco (Auckland University of Technology), Artjoms Ivlevs and Don Webber (University of the West of England)

University teachers are often baffled that students often choose not to attend classes, as there is a sizeable literature that indicates attendance is a significant determinant of academic performance. With the use of a survey of first year students, this paper focuses specifically on the factors that affect class attendance, as measured by self-reported estimates. We find that a wide range of factors affect attendance: some of these are more immediate, such as the quality of individual teaching sessions or staff; others are less proximate and reflect underlying attitudinal or socio-economic effects. We also find that values, attitudes, and reasons for less than full attendance vary across students depending on whether they are good, average or poor attenders and that lower confidence levels may adversely affect interest and motivation, and hence attendance. This exploratory study culminates with an ordered logistic model that points to effort and accessing the virtual learning environment prior to class as the most significant drivers of increasing attendance rates.



MIDDLEDITCH, Paul and MOINDROT, Will (University of Manchester, UK) *Interaction in lectures with mobile devices* (Workshop – Session 2C)

Will Moindrot and Paul Middleditch demonstrate the use of mobile devices to allow in class interaction delivered by 'over web' classroom voting technology. The talk will present evidence collected from students on how they felt the technology enhanced their learning and overall satisfaction of the taught courses in Macroeconomics at the University of Manchester. The session will also demonstrate a live interaction session for participants through their mobile phones or web enabled devices to show how the technology works in practice. We sum up with some open comments from the students on the use of 'in lecture' interaction and discuss how we can imbed teaching innovations such as peer interaction looking ahead. Participants will be given details and advice on how to adopt this technology themselves.



NIEUWOUDT, Liezl (Stellenbosch University, South Africa)

Teaching undergraduate economics in a South African university: exploring the land of collaborative problem-based learning (Paper – Session 3D)

Although the body of higher educational literature clearly shows that active, student-centered learning methods outperform traditional models in terms of effectiveness, cooperative learning methods (especially in teaching economics) are rarely used in higher education (Watts & Becker, 2008). Inspired by Professor Ed Jacobs' positive outcomes in chemistry at Stellenbosch University using a collaborative, problem based model, the department of Economics successfully replaced the lecture approach with this student-centered approach during their winter school for Economics 114 in July 2011 and repeated the method in July 2012. The paper explores the journey of this transformation in teaching model from conception, through the preparation, the execution and finally reports on some of the outcomes. The 158 students (2011) were allocated to groups of three for the duration of the two weeks programme and solved problems based on the prepared work for the day in these groups. Each group received a set of coloured flash cards that served as (low tech) clickers to show their answers to the lecturer. Qualitative feedback (by means of a questionnaire) was extremely positive. Examining the final marks (quantitative data) for this group presented a significant positive shift in comparison to previous years. The paper further explores the results obtained from repeating this approach in 2012 and reports on the consistency of the positive outcomes. These results confirm the documented successes globally achieved with collaborative models, question lecturers' devotion to the traditional lecture approach and pose challenges to implement this type of approach on a broader scale.



NUNOO, Jacob (University of Cape Coast, Ghana)

Economic literacy among tertiary students in Ghana: Evidence from the University of Cape Coast (Paper – Session 1A)

Co-author(s): Bernard Afful (University of Cape Coast)

The importance of the study of economics is well documented. Economics as a disciple of study touches on real life issues and affect all agents in an economy. This means that all are suppose to have an appreciable amount of knowledge in economics. In this view economic literacy is very crucial since it measure whether people can appreciate the forces that significantly influence the quality of their lives. In a country like Ghana, with about 30 percent illiteracy level, there is an even greater need for people to appreciate what economics is. The successes of the government in the area of poverty reduction, economic growth and development, and good governance must be understood by all. This therefore lay greater claim to the importance to economic literacy.

The need to make economic literacy part of the school curriculum has had lot of force especially from the secondary level of education. In the Ghanaian context, is that the case? What can the educational institutions do to improve the economic literacy of Ghanaian students? What is the level of economic literacy among students in Ghana? It is in the light of these questions that the study seeks to investigate the economic literacy among tertiary students in Ghana. A review of the curriculum will be explored to see have it affect the economic literacy level of the students. The study will employ a simple regression to determine the factors that influences a student's level of economic literacy score.



OLCZAK, Matthew and JONES, Chris (Aston University, UK) **The impact of lecture capture on student performance** (Paper – Session 5A)

The goal of this session is to analyse the impact of Lecture Capture on student performance. Our paper provides evidence that lecture recordings can improve student performance even if lectures are watched online during the revision period only. Nevertheless, the impact is small and their might be evidence of self-selection bias. We hope our paper will generate an interesting discussion surrounding the recording of lectures. It will allow practitioners to share their experience and an important element of the session is to discuss the impact of recordings on attendance and engagement more generally.



OPPONG, Raymond (University of Birmingham, UK)

Teaching health economics to undergraduate medical students: the role of the Health Economics Education (HEE) website (Poster)

Co-author(s): Emma Frew and Hema Mistry (University of Birmingham)

The UK health service is currently undergoing organisational changes and under the new structure, General Practitioners and other clinicians will have responsibility for commissioning health care services. With this increased financial responsibility, it has been recognised that doctors require training in understanding the economics inherent in health care to understand the implications of economic policy and evidence based practice. In response to this requirement, the health economics education website was developed to encourage and support teaching and learning in health economics for medical students. The website was designed with two main user groups in mind: students and teachers, and functions both as a forum for teachers of health economics to communicate and to share resources and also to provide instantaneous access to supporting literature and teaching materials on health economics.

The website provides a range of online material that can be used by both health economists and non-health economists to teach the basic principles of the discipline and it provides a range of comprehensive basic and advanced teaching materials that are freely available to teachers of health economics. The website is still early on in its development and challenges remain. However, there is evidence to show that the health economics education website is accessed widely not only in UK but around the world. In addition, it is the only online education resource that exists for teaching health economics to medical undergraduate students. It therefore provides a valuable tool to encourage the incorporation of health economics training into the undergraduate medical curricula.



PATEL, Serena and PETROPOULOU, Dimitra (University of Sussex) **An introduction to EconoFun: an economics board game** (Workshop – Session 5C)

I am a 2nd year Economics student at the University of Sussex and have developed an educational economics board game called "EconoFun". EconoFun's target audience is economics students at A-level and first year undergraduate, with questions based largely on the current A-level syllabus. The game is to be played by 6-8 students and administered by a teacher/lecturer/seminar tutor. The objective of the game is to progress as many spaces as possible, as quickly as possible. The winner is the first players to reach the centre of the board, with each player progressing by correctly answering a series of questions, which can involve answering specific questions, defining economics terms or analysing diagrams. The game serves to reinforce students' knowledge of core micro- and macroeconomics and to the development of key skills.

The interactive session would comprise a ten minute presentation, in which I would provide a brief overview of the game and its aims, as well as explain how it is played. This would be followed by twenty minutes of game play, which would be an invaluable opportunity to get feedback on the game and its value as a learning tool. The final fifteen minutes would involve an open discussion, where I can address any questions and identify the most and least effective features of the game.

The game primarily aims to encourage interaction and engagement between players and this workshop would be an effective way of testing its potential.



PEDAUGA, Luis (University of Grenada, Spain)

Encoding economic expressions in Excel through Unicode: simulating growth models in advanced macroeconomics (Paper – Session 2B)

Co-author(s): Ana Moro-Edigo (University of Grenada)

Modern economy is embedded on a framework of sound theories that together make possible that complex individual behaviours are analytically tractable. The connection between theory and reality is in fact possible by the development of computer-based economic modelling, that make feasible to carry out a wide set of complex arithmetic and logical operations. However, there is a common language in economics that tends to be neglected by students: mathematics.

In this paper we develop a teaching methodology that makes the results of simulation models in macroeconomics lectures more familiar and understandable through learning by doing activities. As a novelty, we combine the interactive characteristics of a spreadsheet program as Excel, but using economic notation based in the Unicode plain-text linear format for mathematical expressions (Sargent, 2010).

The reason to use the Unicode standard is based in the fact that it has been designed to be easy to write and, even more importantly, easy to read. Also, with Unicode, one can represent mathematical expressions more legibly and the resulting near plain-text can often be used with few or no modifications in other numerical environments such as Matlab, Mathematica or Maple. Also, students learn how display and edit mathematics expressions in a built-up form in Word or [La]Tex. This experience has been implemented with Advanced Macroeconomics students at Granada University during the period 2012-2013, and the paper describes the heuristics to simulate and calibrate a variety of Neoclassical Growth Model in the computer lab.



PROUD, Steven and CANNON, Edmund (University of Bristol, UK) **Evaluating the effects of changes of educational delivery: a new perspective** (Paper – Session 3C)

Changes in technology and funding per student have made it increasingly important to assess the effect of changes in teaching methods. Traditional empirical studies of educational changes attempt to measure these effects using exam results of students exposed to the new educational production technology. Many identification issues can be addressed by appropriate experimental design (e.g. controlled trials) or using econometric techniques (e.g. difference-in-difference or regression discontinuities).

In this paper we show that using exam results may give naïve impressions as to the effectiveness of educational reforms since students' objective functions do not depend upon exam results alone. Unobserved desiderata include leisure, part-time work to fund studies and accumulating other forms of human capital. If there are diminishing marginal returns to time spent on learning, then the budget constraint will be non-linear between other activities and exam grade. Furthermore, since maximum exam grade and maximum time spent in other activities are fixed for any one individual, the effect of an improvement in technology is likely to lead to an increase in the concavity of the budget constraint. This increase in concavity will lead to students experiencing both an income and substitution effect: for students at the lower end of the mark distribution there will be an unambiguous increase in exam grade, but under certain conditions, it is possible that students at the upper end of the mark distribution may suffer a decrease in grades due to the increase in the relative 'price' of effort.



SMITH, Peter (University of Southampton, UK) *An economics curriculum for today's students* (Paper – Session 4A)

The content of the undergraduate economics curriculum is largely dictated by the national subject benchmark statement, but there is plenty of scope for flexibility and product differentiation in the design and delivery of the curriculum. This applies in spite of the need to achieve balanced coverage of micro and macro, quantitative methods and econometrics, theory and applied economics, not to mention accommodating a diverse student intake. With the new student fee structure, it is more important than ever before that degree programmes are coherent, well-structured and responsive to student demand. However, in many cases curriculum drift can be seen to set in, it being easier (and more attractive) to introduce new material than it is to dispense with the old. New staff are appointed with their own specialist areas, and new options are created to ensure there is research-informed teaching. In this context it is easy to lose sight of what it is that students really need as part of an economics degree. In particular, it is important to be aware that economics graduates follow many different life-paths after graduation. Some may wish to pursue an academic career in economics, others may become professional economists outside of academia; yet others (perhaps the majority from many programmes) head off for a diverse set of occupations. This paper examines what are the essential elements of a successful economics curriculum and how these can be moulded into a flexible structure that can cater for varied student destinations.



SPIELMANN, Christian (University College London, UK)

Developing students' research, writing and collaborative skills using Wikis (Paper – Session 5B)

Co-author(s): Parama Chaudhury (University College London)

In this paper, we describe the outcome of introducing wikis as a part of required coursework in an undergraduate setting. The wiki project had three main objectives: it gave students an opportunity to do a literature survey or other research, it required them to write analytical prose and it encouraged them to work in groups. Since our modules tend to be large in number and our students quite diverse in their previous experience, they don't often get a chance to write extensively, research or collaborate. The wiki represented an attempt to address this issue. We introduced wikis in two modules in undergraduate economics in the autumn term of 2012-13. One module was an economics course for non-economists and the other one was an advanced applied economics course restricted to economics students. Our study therefore highlights the role of wikis among both expert students and novices. We present data on time patterns of participation and overall student activity on the wiki as well as student evaluations of the wiki project. A major point of interest is the extent to which individual characteristics and group composition (in terms of gender, year of study, country of origin etc.) determined the level of participation and student perception of the wiki project. Finally, we present a comparative study of wikis in the two modules. As the modules were different in size and scope, each had slightly different instructions for students, tasks lists and expected outcomes. We study how these differences affected student contribution and activity and conclude with suggestions on group composition, wiki structure and expected outcomes that optimize the use of wikis as a form of interactive group activity.



STEPHENSON, Juliette and **POTTER, Dale** (University of Exeter, UK) **How can an economics department meet the challenges of fair access?** (Paper – Session 3A)

This workshop will be run jointly by Juliette Stephenson and Dale Potter. Juliette (Senior Lecturer Economics) is currently spending 0.5 of her time as the academic lead for Widening Participation/Outreach in the Business School at Exeter.

Dale is an Exeter Business School alumni who since graduating in 2009 (Business Economics with European Study) has worked in a variety of roles including with an organisation providing support and opportunities for undergraduates from a WP intake.

This workshop aims to share practice with other colleagues in the sector and we hope will generate lively discussion. We will briefly address the background to the Fair Access agenda, then focus on why this is important for our discipline and outline some of the activities and initiatives that we are currently engaged with. In particular this involves sustained investment in building and fostering relationships with students and teachers from our local schools and colleges.



VARUM, Celeste (University of Aveiro, Portugal) **Assessment and feedback** (Paper – Session 4C)

Co-author(s): Irina Silva and Vera Afreixo (University of Aveiro)

It seems consensual that the recent crisis has reinforced the importance of being economically literate and of the need of having a solid understanding of the functioning of the economic activity (Haskell and Jenkins 2002; Stern 2002). Economic literacy can be viewed as the type of knowledge required to control a set of tasks related to economic issues that everyone who is economically literate might know. It becomes clear tough that to improve economic literacy, economic education is the right path to shift in. It has been argued that the best way to promote a society of financially and economically literate adults is to educate children. There are however doubts about children interest and capacity to understand economic principles. Against this background, a few authors argue that children are indeed able to understand economics, providing evidences about the efficacy of educational programs on economics and finance to children (Kourilsky 1977; Laney 1988; Hawthorne, Rodgers, and Wheeler 2003). Along with Hawthorne et al. (2003) for example, several authors defend that early instruction in economic principles and financial skills on the primary gradelevel adapted to students' needs might provide children with a solid understanding of economics, by exposing them to economic conceptions and moreover by providing them the skills to apply the knowledge acquired in the economic lessons. This paper contributes to improve knowledge on this field of research. This paper addresses two research issues: the efficiency of economic programs applied to children, and which factors affect children's test scores in economics. In this regard, a questionnaire was developed and the level and difference of economic knowledge were compared, using a control group of children who received economic instruction and other group who did not. The results confirm the efficiency of the economic program, and the role of socioeconomic variables.



VARUM, Celeste (University of Aveiro, Portugal) **Games, experiments and simulations** (Paper – Session 1A)

Co-author(s): Irina Silva and Vera Afreixo (University of Aveiro)

Economic literacy can be viewed as the type of knowledge required to control a set of tasks related to economic issues that everyone who is economically literate might know. It becomes clear tough that to improve economic literacy, economic education is the right path to shift in. It has been argued that the best way to promote a society of financially and economically literate adults is to educate children. There are however doubts about children interest and capacity to understand economic principles. Against this background, a few authors argue that children are indeed able to understand economics, providing evidences about the efficacy of educational programs on economics and finance to children (Kourilsky 1977; Laney 1988; Hawthorne, Rodgers, and Wheeler 2003). This paper contributes to improve knowledge on this field of research, presenting six activities which can be used to teach economics to children, of 8-12, and discussed the developments of the programme, advantages and shortcomings.



VIDLER, Chris (Woodbine Publications, UK) *Is economics dead?* (Poster)

This poster is designed to identify those barriers which prevent the motivation, engagement and learning of those students new to economics. Its outcomes will be to identify those strategies which are most likely to break down these barriers.

I recently published a paperback "Is Economics Dead". It was written with a sixth form readership in mind but initially I have had more enthusiastic responses from Universities. This puzzles me. The aim of my book was to explore the extent to which economics can help students and the general reader to understand what is going on in the world around them. The book provides an extended critique of "traditional" economic theory and modelling and attempts to incorporate new and emerging approaches to the discipline – contextualised in terms of the current economic difficulties faced by most "western" economies.

Is Economics Dead is designed to be added to "reading lists" for students of introductory economics courses while at the same time being accessible to the general reader. It is modelled closely on older writers such as Donaldson and Eatwell who managed to bridge the educational/public divide.

Recently there a whole slew of books have been published about the current economic crisis – most focus on the "city" and institutional failings. There are, as you will all know, some more academic treatments on the other end of the spectrum. "Is Economics Dead" is designed to bridge the gap between these extremes.



VOLPE, Guglielmo (Queen Mary University of London, UK) **Notions of belonging among first year economics students** (Paper – Session 3A)

The paper reports on the research carried out across three London Universities and aimed at measuring the sense of belonging among first year economics students. Evidence from theoretical and empirical research suggests that students' academic performance critically depends on the development of a sense of being part of and of fitting within the Institution of study. An early development of this sense of belonging is likely to lead to better academic performance, progression and achievement. The paper focuses on the measurement of sense of belonging and on the understanding of the factors most likely to influence its development. Goodenow's (1993) Psychological Sense of School Membership instrument was utilised to collect data from about 1900 business and economics students across two Business Schools and one Economics Department. The paper reports on the overall experience among all students and then focuses on the actual experience of the economics students. One of the interesting aspects of the research lies in identifying potential differences among economics students enrolled on programmes delivered within Business Schools versus students studying within "self-contained" Economics Departments/Schools. Are the latter more likely to identify themselves with the Institution they are studying at rather than the former who, instead, are studying within a larger Institution with "fuzzier" boundaries across subjects of study?



WHEAT, David (University of Bergen, Norway)

Learning economics with dynamic modelling: an international collaboration (Paper – Session 3B)

Co-author(s): Iryna Lukianenko, National University of Kiev-Mohyla Academy, Ukraine

Using system dynamics modelling in the economics classroom has been on the DEE agenda for three consecutive conferences: "MacroLab: Using Simulation to Teach Macroeconomics" (2007), "Enabling Students to Compare Theories in Media Stories about the Economy" (2009), and "Getting Started with Simulation Software" (2011). The tradition continues this year with a presentation by colleagues who are collaborating on an international project using system dynamics (SD) to enhance economics education.

Professor Lukianenko chairs the macroeconomics-oriented Finance Department at National University of Kiev-Mohyla Academy (NaUKMA) in Ukraine. Professor Wheat is in the System Dynamics Group at the University of Bergen (UiB) in Norway. We are co-coordinators of "Learning Economics with Dynamic Modeling," a three-year project approved by the Norwegian Centre for International Cooperation in Education and funded by the Norwegian Ministry of Foreign Affairs. The project goal is to integrate SD modelling in the economics curriculum at NaUKMA. The teaching component of the project includes training ten NaUKMA graduate students in courses at UiB, training NaUKMA professors and students in workshops in Kiev, and developing online training. The research component includes developing an SD-based macroeconomic model of Ukraine.

The project began this year, with NaUKMA students taking courses at UiB, developing three sub-models of MacroLab Ukraine, and returning to teach their colleagues in workshops in Kiev. More student and faculty exchanges will occur in 2013-14, and we will develop an online training system to sustain the project. We are prepared to describe the project in a paper or poster.



WILLIAMS, Andrew (University of Western Australia, Australia) **Who goes to lectures? And does it matter?** (Paper – Session 3C)

Co-author(s): Elisa Birch (University of Western Australia)

Using a combination of survey and student record data from a first year university economics principles class, we look at the characteristics of students who are attending face-to-face lectures, versus those students who choose to view these same lectures via online lecture recordings. The survey includes the Biggs (2001) Revised Study Process Questionnaire (SPQ) on 'deep' versus 'surface' learning methods, which we use to see how these different learning approaches may be related to attendance at lectures and/or online lectures. The econometric evidence presented here suggests that lecture attendance is positively affected by whether or not the student employs a 'deep' approach to learning. Furthermore, our results also show that attendance at lectures falls significantly the more hours a student works - more than 13 hours of work per week results in lower mean attendance - and that females attend more lectures in person than males. Finally, there is strong evidence that students treat face-to-face lectures and viewing these lectures online as substitutes, rather than complements, to learning. We end with some tentative evidence on whether the chosen mode of lecture delivery ultimately makes a difference to a student's final mark in the unit.