

# DEE 2023 Abstracts

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Monday 11:00 – 11:50 James Watt Hall

### Panel: The 2023 QAA Economics Subject Benchmark Statement- what's new and why is it important?

Parama Chaudhury (University College London), Alvin Birdi (University of Bristol & Economics Network), Dimitra Petropoulou (London School of Economics), Denise Hawkes (Anglia Ruskin University & and Royal Economic Society)

The 2023 QAA Economics Subject Benchmark Statement (SBS), published in March, after a public consultation in late 2022, provides an opportunity to discuss some of the key changes in economics education and the evolving role of these statements (which is different across the devolved nations).

As many will know already, these statements lay out the nature of study and the academic standards expected of graduates in the subject areas and show what graduates might reasonably be expected to know, do and understand at the end of their studies. The sector's response to the Covid pandemic and lessons learned from emergency responses in this period implies that economics education is in a very different place from what it was when the last benchmark statement was published. At the same time, the QAA has a new emphasis on EDI, sustainability and employability and entrepreneurship.

This panel brings together members of the 2023 SBS Review Advisory Group to discuss the key issues thrown up by these changes, including how technology can facilitate impactful and inclusive teaching and learning in light of the post-pandemic experience and the evolution of appropriate assessment design among other areas.

Monday 11:00 – 11:50 Craig Room

### Panel: Ask the editors

Steven Proud (University of Bristol), David McCausland (University of Aberdeen), Caroline Elliott (University of Warwick) & Gail Hoyt (University of Kentucky)

This panel session is designed to offer participants at DEE, many of whom may not have published in pedagogy, or scholarship of teaching and learning before, an insight into what we are looking for in the International Review of Economics Education.

This is a precursor to the special issue of IREE, based upon the best papers presented during the conference.

In particular, we will discuss the:

1. Themes that we are interested in within the journal,
2. What makes a "good" paper, and how to increase your likelihood of being accepted,
3. How IREE integrates within the rest of the HE literature.

This session is meant to be an interactive session, with participants free to ask questions, and provide suggestions for the journal as a whole.

Monday 13:00 – 14:30 James Watt Hall

## Gamification- F2F, Online, Synchronous? A Case Study Comparison

Matthew Olczak (Aston Business School, Aston University) and Chris M. Wilson (Loughborough Business School, Loughborough University)

Short games and experiments are commonly used as teaching methods in economics education (e.g. Elliott et al. 2021). Such activities have been shown to aid student learning (e.g. Emerson and English, 2016). Traditionally these gamification activities were conducted with paper and pen within the classroom. However, platforms have subsequently been developed to enable them to be run online. Carter and Emerson (2012) compare paper and pen versus such platform methods under synchronous delivery. More recently, Guest and Olczak (2021) and Atwood et al. (2023) have discussed the feasibility of using online platforms to deliver experiments asynchronously. However, there is little evidence on how this asynchronous approach compares to other delivery contexts.

To address this, our paper provides novel evidence on how the choice of delivery format for gamification impacts students. We use a game in which participants are provided with a series of choice tasks to demonstrate behavioural biases in decision making (Bennato et al. 2020). An otherwise identical version of the game was delivered to separate cohorts under three different formats i) in-person delivery using more traditional polling software ('polling-synchronous-F2F'), ii) an online platform in a remote asynchronous context ('platform-asynchronous-remote') and iii) in-person delivery where students access the platform on their devices but in a classroom setting ('platform-synchronous-F2F'). After each experiment, participants were asked to complete an anonymous survey with equivalent questions.

Our first key finding is that in-game decision making was broadly consistent across the different formats. This is important since it demonstrates that the intended learning outcomes can be achieved under all three delivery formats. In particular, the asynchronous version can produce similar results and thus is a viable method for delivering a game. (We further explore this in our separate working paper (Olczak and Wilson, 2023) where we also provide detailed, practical, step-by-step guidance of how to adapt a classroom experiment for asynchronous, remote delivery.)

We next provide further insights by comparing student participation, engagement and satisfaction across the different formats. We show that the two in-person formats ('polling-synchronous-F2F' and 'platform-synchronous-F2F') had higher participation rates (as measured by the percentage of the cohort that submitted an answer to at least one of the experimental questions). Moreover, the two in-person approaches, especially the 'platform-synchronous-F2F' format also had higher student engagement (defined as the average proportion of the cohort that completed a typical question). This implies that in-person, synchronous activities may be more useful in motivating student participation and engagement relative to remote, asynchronous activities. Finally, the participant survey results suggested that students also favoured the 'platform-synchronous-F2F' approach— they enjoyed the game more, and learnt more, under this format. This suggests that students have a preference for i) using the online platform rather than polling technologies, and ii) playing the game in-person rather than remotely.

Overall, our findings indicate that the 'platform-synchronous-F2F' format had the largest benefits. Hence, the additional advantages of online platforms may be best utilised within a synchronous in-person delivery setting to sustain a learning community.

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## Investigating the link between students' learning intentions and their learning outcomes, experience, and performance

Erkal Ersoy, Rachel Forshaw & Suzanne Lampert (Heriot-Watt University)

In this paper, we aim to understand the impact, if any, of students' learning and studying intentions on their learning outcomes, experience, and performance. More specifically, our goal is to understand whether students who express explicit intentions to engage with the course in various ways (within and outwith the classroom) are more likely to do so and whether this higher degree of engagement leads to a better learning experience and better performance on the course.

To explore this link, we have designed an experiment in which students on an introductory economics course are divided into control and treatment groups. Having randomly allocated students to these groups in a randomised controlled trial setup, we collect data on treated students' plans for the coming week of the course by using a weekly survey. Those in the control group also get a weekly survey that excludes the key treatment question.

Our hypothesis, which is inspired by well-established concepts in behavioural economics and psychology, such as Nudge theory, is that students' act of responding to the weekly survey makes them more likely to complete what they have committed to doing and they, therefore, engage with the course more. As a result, we expect the students in the treatment group to, on average, enjoy the course more and achieve better marks than their peers in the control group. Data collection for the

experiment is ongoing, but early results based on attendance and performance on summative assessments completed thus far in the course corroborate this hypothesis.

### Examining the outcomes of switching Economics 1 to the Core syllabus in the same year of the COVID-19 pandemic's disruptions

Liezl Nieuwoudt, Gideon du Randt & Sophia du Plessis (Stellenbosch University)

This quantitative research study examines the outcomes of switching from a traditional introductory economics curriculum to the Curriculum Open-access Resources in Economics (CORE) syllabus during the COVID-19 pandemic's disruptions. The study aims to evaluate the efficacy of the CORE syllabus, which emphasizes historical evidence and introduces economic models and data earlier in students' academic journey. The study will focus on a sample of approximately 2000 undergraduate students who are taking an introductory economics module at a traditional residential university in South Africa.

To investigate the outcomes of the switch in syllabus, assessment data from pre-pandemic and pandemic periods will be analyzed to estimate the effect of the CORE syllabus on students' academic performance compared to the traditional syllabus. The analysis will control for various factors that may affect student outcomes, including (among others) gender, prior academic achievement, and socioeconomic background.

The study's findings will contribute to the literature on the effectiveness of the CORE syllabus and online learning in economics education during the pandemic. The research will also provide insights into the challenges and opportunities of transitioning to a new curriculum during a disruptive event such as the COVID-19 pandemic.



Monday 13:00 – 14:30 Craig Room

## Pedagogical implications of group work as assessments

Arpita Ghosh (University of Exeter), Atisha Ghosh (University of Warwick), Anastasia Papadopoulou (University of Bristol)

Group work is a useful assessment tool. It not only helps students assimilate the course material, but also enables them to learn in a cooperative space, equipping them with important transferable skills of communication and negotiation (Hammar Chiriac, 2014). As such, it is one of the most used 'inherently' authentic assessment tools, but it also invites criticisms of "free riding" and "social loafing" i.e., students' individual efforts may not be identifiable within a group leading to lower effort by an individual student (Davies, 2009; Mellor, 2012). Contemporary research has also investigated the pandemic effect on group dynamics and methods of reducing grade differential in assessments (Orlov et al, 2021). Moreover, pedagogic literature has examined ways to encourage students to participate actively in team-based learning and provide effective incentives (Jenkins and Chaudhury, 2015). Over the years, use of group work as assessments has witnessed a considerable rise. However, the pandemic posed new challenges to working together as coordination among individuals, sometimes over different time zones, became difficult. Further, there are quite a few organisational challenges associated with group work (limited resources, managing conflict etc.), which further impedes its implementation.

As discussed above, existing evidence suggests, group work as an assessment tool has efficacies as well as difficulties associated both at the educator and the student levels. In this project our first objective has been to pool data across different Economics departments in the UK to measure whether modules that incorporate various amounts of group work contribute to a differential average in overall assessment compared to other modules. Preliminary descriptive analysis for 2020-21 and 2021-2022, involving 87 UG modules, show that the number of modules not incorporating group work is much higher than those which implement it. Interestingly, most group work is concentrated in the first year of the degree programmes. One possible justification for this could be that in UK degree programmes, the first-year marks do not count towards the overall degree classification. Hence, educators might be more inclined to experiment with group work, and at the same time inculcating more employability skills.

In our sample, all the group work across modules is summative in nature. Modules with group work components have less spread summative assessment results with significantly lower mean overall grades, compared to modules which do not involve group work. However, the differences in mean and median marks on modules with and without group work are seen to be less pronounced in the final year of the degree programmes. A possible reason for this could be the fact that students gather more experience as they progress in their degrees, realising that working in teams would be an integral part of their work life after graduation. They also tend to develop stronger friendships which may make group work easier to execute. We then proceed to categorise modules based on the number of group work components it incorporates. We define this to be the 'intensity' of group work in a module. We find that modules which involve more than one group work components have lower mean and median overall grades compared to modules with only one group work component. Also, modules with one group work component demonstrate significantly lower averages than modules without any group work, but the same cannot be said for modules with a higher intensity of group work.

We then categorise modules on the basis of their types i.e., whether they are quantitative (e.g., Econometrics and Maths modules), more discursive in nature (e.g. Economic history) or a mix of both

(e.g. Microeconomics, Macroeconomics etc.). Analysis reveals that the mean and median final mark on modules with no group work are higher than those with group work especially in quantitative modules. The differences in the discursive and mixed modules are not that stark.

Our next aim is to understand how group work assessments have evolved over time, especially in the context of the pandemic. We also intend to analyse how modules' intended learning outcomes reflect the inclusion of group work assessments and the skills students' gain from them. We further seek to understand educators' perspectives on including assessments in the form of group work and the conditions under which they would be motivated to organise such assessments. In the framework of authentic assessments with employability implications, our project aims to offer an additional contribution to the existing literature, by combining both student outcomes and educators' perspectives regarding collaborative assessments.

### The death of exams? Grade inflation and student satisfaction when coursework replaces exams

Petar Stankov (Royal Holloway, University of London)

The paper reviews the motivation for replacing a final exam with continuous coursework assessment in an advanced undergraduate economics module. It lays out the structure of the assessment reform and evaluates its effects. There was a boost in student satisfaction relative to a previous cohort where a final exam dominated the assessment landscape. However, the reform inflated the grades in a particular component of the continuous assessment. The paper proceeds with grade simulations to reveal an opportunity to stem the rise in overall grades in the module in its following iterations. The grade simulations offer an assessment reform agenda to maintain high student satisfaction, disinflate grades, and stabilise staff workload. The paper evaluates the scalability of assessment reforms where final exams are targeted for replacement by continuous assessment. The evaluation suggests caution with such reforms if they are necessary in the first place. In short, such reform may both be feasible and desirable in small classes. However, compelling arguments caution against a wholesale rollout.

### Essays in Economics in ICU: Resuscitate or Pull the Plug?

Mary Dawood, Maria Psyllou & Kamilya Suleymenova (University of Birmingham)

This study investigates the perception of Economics academics on the impact and implementation of text-generative artificial intelligence (G-AI) in higher education, particularly in teaching and assessment. The current debate on the application of G-AI is continuously evolving. Acknowledging the dynamic evolution of G-AI platforms and the corresponding regulatory framework, it becomes apparent that academics are profoundly influenced by the diverse viewpoints presented in this ongoing discourse. Traditional teaching and assessment methods have long been the foundation of academia, but the rise of G-AI introduces innovative approaches that challenge the established norms, thus prompting a re-evaluation of these traditional practices.

In this context, our survey focuses on academics within the Economics discipline who are affiliated with a UK University. The principal objective is to explore their perspectives towards using and incorporating G-AI in the academic practice, with a specific focus on teaching and assessing the written skills among Economics students using essays and take-home assignments. It is worth noting that, in our study, a substantial proportion, just over two-thirds, of the respondents reported being familiar with G-AI and acknowledged utilising it themselves.

In the first instance, to preserve academic integrity, the majority of the respondents highlighted the immediate need to move away from essays and short-answer questions. Furthermore, most academics seemed to believe that, in order to produce holistic future-ready graduates, it will be instrumental to adjust the traditional marking criteria and to modify the level of questions by moving up Bloom's taxonomy. Meanwhile, it is vital to educate students on the ethical use of this technology and to explore new ways to access the new G-AI skill set. Yet, the most preferred assessment action in the short run is to keep doing things the traditional way, then refer any concerns to the academic integrity officer or apply relevant penalties. Interestingly, separating quantitative and qualitative modules yielded very similar survey results, despite the perceived wisdom that mathematical and essay-based modules are likely to generate different attitudes in educators.

There is a general consensus towards integrating the teaching of G-AI into discipline-specific modules, indicating that Economics educators are more inclined towards introducing an economics-focused G-AI set of skills. However, those academics who are newer to the profession, are less familiar with the UKPSF values, and less familiar with the new G-AI tools showed a stronger preference towards having G-AI taught in a separate module, as opposed to integrating it into discipline-specific ones. This may be attributed to lack of confidence or knowledge in implementing such integration. Nonetheless, about 70% of respondents support that written skills are still important in Economics, but they did not align this with the perceived need for ethical use of G-AI. This hints at the potential gaps in awareness and understanding among academics.

In terms of exploring G-AI and identifying the need to upskill oneself, respondents' preferences varied based on their familiarity levels. The vast majority expressed an interest in learning more about G-AI and its uses in education. From the options we offered, educators who are likely to feel the most pressure, that is colleagues with significant volume of coursework in module assessment, are newer to the profession, and/or have less experience with the G-AI tools, are the ones most likely to engage in self-experimentation and self-learning. On the other hand, their more experienced counterparts, who are likely to have more network support, are keen to draw on organised events and wider opportunities, including educational conferences, AI training courses, and informal discussions with colleagues and students. Gender differences and academic experience also influence the interest in exploring G-AI, with males and relatively new academics showing less enthusiasm.

In conclusion, to uphold academic integrity, there is a prevailing preference for transitioning away from essays as the primary mode of assessment, while producing written content remains an essential skill for future Economics graduates. The survey reveals that while most respondents are familiar with G-AI, there exists a notable divide in their approaches for incorporating G-AI into teaching and assessment. In addition, it is evident that providing support and training to both academics and students will be essential in facilitating an effective and ethical adoption of G-AI in educational practices. To bridge gaps and make well-informed decisions on its integration, further research and open discussions are also necessary. Finally, comprehending the perspectives of Economics academics is undoubtedly crucial for determining the practical implementation of rules or guidelines and gauging their reception among stakeholders.

Monday 13:00 – 14:30 Gibson Room

### Information Interventions to Counter Procrastination

Panos Giannarakis, Emanuela Lotti and Jana Sadeh (University of Southampton)

The economics literature on present-bias sheds light on the procrastination behaviour of students in Higher Education. This theory suggests that when a course of action is evaluated at time  $t$ , it may be optimal to spread the workload in a particular pattern starting from  $t+1$  (tomorrow), however when time passes and tomorrow becomes today, the students weight the cost of starting too highly and chose to postpone the work until the following time-period.

While literature has clearly established the detrimental effect that procrastination has on student performance, there is relatively sparse research on potential behavioural interventions to counter it. In this paper we apply a combined experimental and randomised control trial approach where we measure time and risk preferences for a cohort of students and then follow this with a nudge for the treatment group that combines the fragmentation of a large task into smaller chunks with a weekly reminder of the tasks to work on.

We find that the intention to treat has no significant impact on either grades or submission time unless students followed through with our reminder and interacted with the task list. These students, who were actually treated, received significantly higher grades, and submitted earlier than those who did not. The task list itself is a useful tool even if not coupled with the weekly reminder, it is significant for both groups of students and increases average grades, with those using it weekly receiving a grade that is on average 6.7 points higher than those who did not. In addition, the more tasks are completed the higher the grade received. Completing 10 tasks are associated with around 1.7 out of 100 higher marks in the dissertation/literature review. If we look at subgroup effect, we find that students who are risk averse submit earlier, although do not necessarily receive higher grades, and that treating this group leads to significantly earlier submission. Finally, we find that our self-reported measure of procrastination is a poor predictor of actual behaviour, and that observed procrastination on a low stakes online test taken at the start of the term is significantly related to lower grades.

These findings suggest that the task breakdown checklist is a helpful tool for long term assessment and that weekly reminders on their own are insufficient. Combining the two increases the use of the tool and improves student outcomes. This has important implications for higher education where students are expected to carry out a greater degree of independent work. It suggests that providing benchmarking forward-feedback can support self-led projects and improve student outcomes, but only if students decide to engage.

### Becoming the confident learner: insights from an exploratory quantitative analysis of in-module data

Andrew Mearman, Tadeusz Gwiazdowski, Peter Hughes & Michael Reynolds (University of Leeds)

This paper presents initial findings from the ongoing project exploring student transition into university called EASYTAP (EASing Your Transition After the Pandemic), a project co-designed and partly executed with undergraduate student co-researchers. The paper explores students' confidence and its link to feedback and the students' activity.

We analyse data on confidence, collected using a short Generalised Self-Efficacy Scale, self-reported activity in applying for industrial placements, and extra-curricular activity. All data are gathered via learning platforms on three modules: one semester-long first year module and a concurrent pair of second-year Economics modules. Additionally, we utilize learning analytics data on students' responses to online quizzes plus activity within the module including watching videos.

The data collection is ongoing so we cannot at the time of writing say much about our findings; however, preliminary exploration of the data collected shows evidence of clear pathways taken by students. Future analysis of the data will explore principally how the measures of self-reported confidence can be (statistically) explained by biographical data, including those data on extra-curricular activity, and data collected on activity within the module. Analysis will also shed light on how these relations differ between groups of students (if at all), as well as illuminating any relations between the different types of activity students engage in, thereby allowing inference about time use.

## Does nudging higher education students improve attendance? A quasi-natural experiment

Carlos Cortinhas (University of Exeter)

This paper examines the effects of nudging interventions on undergraduate student attendance in tutorial sessions, with a focus on evaluating the effectiveness of personalized follow-up email messages. While the negative impact of absenteeism on educational outcomes is well documented, recent years have seen a rise in the use of nudging interventions to combat absenteeism and improve student performance. The evidence so far has yielded mixed results with some raising concerns about the potential negative effects of nudging on students.

This study conducted a quasi-natural experiment on over 400 second-year students at a UK university, randomly dividing them into treatment and control groups. The treatment group received personalized follow-up email messages urging them to attend tutorials if they had missed a session, while the control group did not receive any nudging intervention. The two groups of students had separate lectures, tutorials and virtual learning environment set ups, but instruction was provided by the same teaching team. Preliminary results suggest a large, significant positive effect of the nudging intervention on attendance rates.

This study contributes to the ongoing debate on the effectiveness of nudging interventions in higher education and provides insights into strategies to combat absenteeism among university students. These findings suggest that personalized follow-up email messages may be an effective and practical method for improving attendance rates in tutorial sessions, potentially leading to improved educational outcomes.

Monday 14:55 – 15:40 James Watt Hall

### ChatGPT and AI- what concerns you as an academic?

Rabeya Khatoon, Stefania Simion and Annika Johnson, University of Bristol

In this interactive workshop, we post the above question that caused a lot of concern among academia this year. Our objective is to collect and rank concerns and give the opportunity to discuss them in small groups of colleagues with a view to coming up with some actions. We plan to run the session in four parts. The very short first part will be for us to introduce the topic and give a brief on action learning with some example questions.

The second part will involve anonymously collecting issues from the delegates, using slido, under the title- 'ChatGPT and AI- what concerns you as an academic?' We'll then ask the delegates to rank the responses that come, and they will be prompted to pick a top-ranked issue per table. The third session will involve one volunteer per table elaborating on their worries in the subgroup and for the rest of each subgroup to engage in action learning with open questions facilitated by each of us. In the final session, we'll gather together and collect summaries on potential action plans that might emerge from the discussions.

Monday 14:55 – 15:40 Craig Room

## Improving Student Comprehension Through Interactive Model Visualization

Simon D. Halliday (University of Bristol), Christopher Makler (Stanford University), Douglas McKee (Cornell University), and Anastasia Papadopoulou (University of Bristol)

A large literature (e.g., Larkin et al., 1980; Sherin, 2010; Eichenlaub and Redish, 2018) has shown that novices and experts across the STEM disciplines differ markedly in how they approach and solve problems. While experts rely on a deep conceptual understanding to select appropriate models, novices jump straight to equations, often abandoning their connection to reality. Novices therefore often miss conceptual insights provided by intermediate equations and fail to recognize when computations lead to conceptually impossible results such as negative prices or violations of resource constraints.

Many STEM education scholars (e.g., Dreyfus and Halevi, 1991; Hegedus and Kaput, 2004) find that giving students scaffolded exercises in which they work with a visualization tool can be highly effective in teaching novices to think more like experts. Using model visualization software developed by Christopher Makler for EconGraphs.org, we have created more than 20 interactive exercises that span the breadth of most intermediate-level microeconomics courses. Students make predictions about the impact of a change to a model, and then use an interactive visualization to test their predictions. Finally, they compute the solution using algebra to induce a connection between the visual and mathematical representations.

We chose intermediate microeconomics, as instructors often report that at their institution it is one of the courses with which students seem to struggle. Students also regularly have trouble seeing the relevance of models discussed in microeconomics in their textbooks. Instructors can dramatically increase this relevance by providing real-world examples and showing how models can be useful to understanding our everyday lives (Bayer, Bhanot, Bronchetti and O’Connell, 2020a). Helping students succeed in intermediate microeconomics is also a way to encourage students to complete a major or minor degree in economics.

Furthermore, the structure and instruction of intermediate-level courses has implications for diversity and inclusion in economics: If students are alienated by the mathematical and quantitative requirements of economics, and that alienation can be ameliorated by particular teaching practices, then it behooves instructors to adopt such practices.

Finally, it is important for instructors to consider the cognitive challenges of effective teaching in intermediate microeconomics, and using interactive graphs can help instructors address several of them. With interactive graphs a student may overcome misconceptions they have of how models work, they can address having insufficient prior knowledge of algebra, and can transfer knowledge of algebra and calculus to economic intuition (Chew and Cerbin, 2021).

We used these interactive exercises in classes at three institutions (two in the US in Fall 2022 and one in the UK in Spring 2023). The interactive graphs may be manipulated by dragging objects, using sliders, or typing numbers directly into fields. They are used differently at each institution, ranging from pre-class quizzes to in-class exercises to homework problems. Students complete most of the exercises outside of class, but in some cases, students work together in the classroom to solve problems using the visualizations.

We also surveyed students about the perceived impact of the graphs on their learning. For example, we asked if students felt that the interactive visualization exercises helped them to better understand the course material. The sample sizes for the survey responses at the institutions are, respectively, 71, 167, and 44. Our preliminary results from the three institutions suggest that many students enjoyed the interactive graphs and found them somewhat helpful or very helpful. Additional analysis from one of the institutions, based on beginning-of-term assessment data that we examined in conjunction with the survey responses, suggests that especially students with weaker math and introductory microeconomics skills reported liking the interactive exercises. Furthermore, additional data from the same institution shows that students who start the term with more positive views of economics found the interactive graphs more helpful than other students do. Also, students who agreed that economics was applicable to their daily lives were also more likely to value the interactive exercises.

Given our results, producing interactive graphs for courses in which students do not have the same mathematical preparation as is typically expected of a student in microeconomic theory (e.g., advanced algebra and calculus), may be particularly useful for student learning and other important student outcomes. The ways in which interactive graphs can be used are also remarkably diverse, ranging from inclusion in lectures as part of step-by-step instruction to using them in pre-class or post-class formative quizzes to incorporating them into summative assessments such as problem sets or take-home exams.

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Monday 14:55 – 15:40 Gibson Room

## Incorporating values and value judgements into economics teaching

Jamie Barker, Sam de Muijnck, Kristin Dilani Nadarajah & Joris Tieleman (Centre for Economy Studies)

Value judgements are at the core of economic questions and analysis, but despite this, current economics teaching generally pushes them to the sidelines. In this workshop we will explore where value judgements enter economics, how to teach students to identify and communicate when value judgements are being made, and how to discuss values critically without pushing a particular perspective onto students. The Centre for Economy Studies works on improving and modernising economics education across Europe, with a particular focus on connecting economics teaching to the real world.

We'll start the workshop by discussing with participants what they want students to take away from their classes, allowing us to focus the rest of the workshop on the content and concerns that are most important to them. Whether you're preparing your students to be future economists, citizens or leaders, whether you want them to develop critical thinking or deeper theoretical understanding, we believe that teaching your students about values will help you reach your teaching goals.

We define value judgements as questions with multiple valid answers, where your preferred choice will depend on your own worldview and personal values. Is the "better" choice the one that leads to more justice, or more freedom, or more equity, or more efficiency? Although value judgements feature most obviously in policy recommendations and visions for the future, they are a part of economics from data collection onwards. Deciding what economic information is important and relevant enough to gather and record; selecting which out of the recorded data is relevant and important for the economic question you are investigating; what you include, exclude and assume about the world in your economic model or theory; which economic phenomena you see as issues or failures that should be resolved; which economic policies you propose to solve these failings; what you see as economic "success" for an individual, business, government or society. All of these are value judgements, and it is impossible to do or teach economics without making at least some of them.

We are advocating for economics students to be taught about a range of different values and value sets, and for them to be taught how to identify and communicate value judgements. To be clear, we are not advocating for economics educators to attempt to instill any particular set of values into their students, that would be indoctrination. In fact, we see a greater risk of the current approach leading to students accepting one set of values uncritically. Little time is generally spent on acknowledging the value judgements made in creating the models and theories taught at the undergraduate level, and even less on critically assessing these assumptions, often leading to students confusing the models for the real economy, and judgements for facts.

We will discuss the issues above during the workshop, but will focus as much as we can on a number of constructive solutions. They vary in complexity and time commitment, but the underlying principles are transparency and applicability. By transparency, we mean being clear with students when judgements are being made, why one particular choice has been made, and where time allows what the other valid choices would have been. This doesn't have to be a convoluted explanation going into the history of the discipline, it could be as simple as "this assumption makes the maths easier, so it's more suitable for an undergraduate class". This transparency allows students to focus on the aspects of the model that are the most important to the educator, and encourages them to be critical of the aspects that are the most contested or arbitrary. By applicability, we mean focusing on how the

models and theories they are taught could be applied in the real world after they graduate. This means identifying the value judgements and moral dilemmas related to the theory that are most likely to arise when using these theories as a professional or academic economist. Which concerns are deliberately excluded from the classroom model for simplicity? Which aspects are over-emphasised to make a point that is widely but not universally relevant?

Some economics students will go on to become leaders in economics, politics and business, but mostly they will work in an advisory capacity in those fields. This means that they need to be able to communicate the judgements that they have made in their analysis, and the value judgements that are still open to the decision maker that they are advising. This reinforces the importance of communication skills as well as value literacy.

Monday 15:50 – 16:50 James Watt Hall

### Gradescope: Improving marking and feedback in economics courses

Antonio Mele & Dimitra Petropoulou (London School of Economics)

Gradescope is an online grading and feedback platform that has been implemented in several large courses at the London School of Economics to improve the speed, consistency, and quality of grading while providing more effective feedback to students. The platform allows instructors and/or students to upload assignments, exams, and other assessments, which can be marked electronically by multiple markers using rubrics, comments, and annotations, as well as automatic grading for multiple-choice questions and AI features that allows the clustering of similar answers together for a speedier and more consistent marking and feedback process across markers.

The implementation of Gradescope at LSE has shown promising results in terms of faster grading, more effective feedback, and higher consistency across markers. However, challenges include, among others, the integration with LSE's learning management system, confusion and frustration for some students and markers, and the lack of integration for second marking.

The implementation of Gradescope at LSE is still ongoing. The paper aims to document the positive and negative aspects of the workflow, quantify time-saving gains, and collect feedback from markers and students. Additionally, the paper will investigate which workflow and options are best for quantitative problem set assignments, such as pre-defined rubrics versus building the rubric as markers grade, positive or negative marking, feedback given directly as scattered comments or as a final comment summarizing suggestions, and the effectiveness and reliability of the AI capability of clustering similar answers together.

### Videos as a form of assessment in Economics

Dimitrios Minos and Cheng Cheng (King's College London)

Effective assessment for technical modules presents a huge challenge in light of online exams and increasing use of AI technologies. Further, it is unclear if traditional paper-based exams are able to assess the depth of understanding and knowledge students gained over the course. In this paper we argue that videos are effective means of tackling these issues. Students were asked to record a 5-minute video explaining their steps towards the solution for a mathematical problem and provide background information, explanations and nuance. The video assessment was used alongside a standard written exam over the past three years. This allows for data collection and a strong positive correlation between the two components emerges. This correlation is robust to cohort and year fixed effects. Further, the correlation coefficient is less than 1, which could be interpreted as two forms of assessment capturing different dimensions (e.g. depth of knowledge and understanding). Finally, a survey was conducted where students are asked about the experience, the time required to record the video and how it compares to standard forms of assessment on various dimensions (e.g. ease, convenience, stressfulness, enjoyment etc.), as well as free text comment. Our results suggest that videos are a valid and effective form of assessment and capable of assessing the depth of knowledge attained by students over the course. This is especially relevant for more technical subjects where assessment typically consists of rather simple problem solving, which in turn can be easily compromised in the face of online exams and increasing relevance of AI technologies.

Monday 15:50 – 16:50 Craig Room

## Economics students' perception of academic challenge and its relationship to student wellbeing

Ros O'Leary (University of Bristol)

'The student is perforce required to venture into new places, strange places, anxiety-provoking places. This is part of the point of higher education. If there was no anxiety, it is difficult to believe that we could be in the presence of a higher education.' (Barnett, 2007, p. 147)

Learning in higher education is by its very nature academically and intellectually challenging (Gibbs, 2010) and involves uncertainty and struggle for students as they grapple with new and challenging concepts (Meyer, Land and Baillie, 2009). Research which connects mental wellbeing issues such as anxiety with intolerance of uncertainty (Buhr and Dugas, 2009) suggests students' abilities to deal with this uncertainty in learning has arguably decreased: in 2020 more higher education students than before reported a decrease in mental wellbeing, which worsened following the pandemic (Pereira et al., 2020; Neves and Brown, 2022).

The WHO defines mental health as 'a state of wellbeing which the individual realises his or her own abilities, can cope with the normal stressors of life, can work productively and fruitfully and is able to make a contribution to his or her community' (2014, p. 10) and the ONS regards personal wellbeing as how people are doing, measuring this by asking questions about life satisfaction, how worthwhile their life is, and how happy and anxious they are (2020). For the purposes of this research, I draw on views from the Higher Education Academy (Houghton and Anderson, 2017) and the University Mental Health Charter (Hughes and Spanner, 2019). Both sets of authors also draw a distinction between mental wellbeing and mental health arguing that mental wellbeing is more than mental health, and both contend higher education curriculum and teaching has a role in improving students' mental wellbeing.

So why should higher education be concerned about students' mental wellbeing? Evidence concerning mental health issues and student performance at university is clear – OfS data shows that students with mental health conditions are less likely to perform well or secure a good job post-graduation and more likely to drop out (Office for Students, 2019). Low levels of mental wellbeing also negatively affect learning, linked to its impact on confidence, motivation, self-efficacy, attendance and engagement (Tinklin, Riddell and Wilson, 2006; Quinn et al., 2009; Craig and Zinkiewicz, 2017).

Douwes et al (2023) argue that in an increasing body of research the perspectives of students, who can be considered as experts in their own student experience, are poorly represented in the wellbeing and higher education research. Similarly, there is an increasing amount of research that explores the connection between curriculum and student mental wellbeing (Marks and Steuer, 2008; Slavin, Schindler and Chibnall, 2014; Houghton and Anderson, 2017), yet little that connects the academic challenging nature of higher education and student mental wellbeing, i.e. how can we design teaching and curricula that both challenges and stretches students but also is positive for their mental health?

This interpretive study draws on perceptions of second year undergraduate economics students from two English universities during 2021-22. The study involved:

- a survey open to all economics students;
- two student friendship conversations, one at each institution.

- two round table analysis sessions (one at each institution) involving academics and students with an interest in academic challenge and student wellbeing.

The student friendship conversations and the round table analysis methodologies were inspired by Sheffield Hallam's Listening Rooms research project (Parkin and Heron Sheffield, 2019), involving students in friendship pairs having themed conversations without the researcher present.

The study found the students reported key themes that influence student wellbeing and students' abilities to engage with challenging learning and assessment. Student anxiety and judgement was one theme, which included students' anxiety (and expectations) about their own performance and judgement from peers and lecturers. A second connected theme was confidence and connections to others and the subject, and how these impact students' wellbeing and study. Assessment was another theme, including not only the stress of assessment, but the enjoyment or fulfilment of a challenging assessment. This paper concludes with what this might mean for the design of teaching and courses in economics.

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## Language models and AI in economic education: Unpacking the risks and opportunities

Tomasz Kopczewski & Ewa Weychert (University of Warsaw)

The emergence of ChatGPT has forced teachers to establish recommendations and ethical guidelines for its use quickly. Even more, teachers must also prepare for more complex solutions approaching real AI right now. ChatGPT is not an AI singularity type as envisioned by futurists of the last century. It's only one of the most advanced language models, which slowly becomes a workaday IT tool for aiding work, science and teaching.

In economics and its teaching, we will naturally face challenges similar to those seen in using these tools in other fields. Most journal publishers prohibited texts generated by language models. The first recommendations regarding credits and student use of language models are emerging, along with the first service platforms detecting student papers generated by the models.

The recent final exam session forced us to quickly adapt the grading rules to the unexpected emergence of ChatGPT as a student's toolkit. We could prohibit using this tool and rely on our intuition to identify papers written solely with the chat. Alternatively, we could create an ad hoc educational experiment to test the tool and extend our and students' experience in using this tool. Ultimately, we created the experimental final assignment consisting of three parts: i) students writing a short essay demonstrating their understanding of the given economic problem, ii) providing a transcript of the chat conversation on the topic, and iii) giving a short critical analysis of chat use. The evaluation covered student statements and the manner and quality of questions in the chat conversation. This approach to changing the student assessment setup seems worth considering because it allows quantitative and qualitative analysis of students' work with the chat. It provides three data samples of texts. With these samples, it's possible to examine the extent of similarity between student texts and the chat's text and investigate how students construct their narratives and how closely they align with the narrative presented by the chat.

Quantitative research requires substantial data, and the experiment will be extended. Still, the initial qualitative assessments of student final assignments inspired the reflections presented in this article. They touch upon the problems of methodology and philosophy of science.

The emergence of ChatGPT has shown how much the two interconnected aspects of human relationships are neglected by economics. The first is the creation of collective knowledge and the social learning process. The second one is the narrative as a carrier of collective knowledge. While the unauthorized use of these tools and cheating remains a didactic concern, creating a narrative where students assume a passive role towards AI as uncritical consumers of knowledge/information generated by these tools can have even worse consequences on creating collective knowledge.

Collective knowledge arises through the conformation and clash of different views. These tools solve the information overload problem, which is the main issue of Herbert Simon's attention economics. However, the power of influence of this tool can quickly destroy the diversity of opinions. IT will influence society like an algorithmic troll, systematically unifying public opinion. This is especially dangerous in teaching economics. The chat narrative on economic theories reflects the lack of pluralism in research and teaching resources. This was incredibly evident in the analysis of conversations with chat presented by students.

Monday 15:50 – 16:50 Gibson Room

### Using COIL to address global economic challenges

Liliana Harding (UEA), Isabel Rodriguez-Tejedo (U Navarra) and Bryan Buckley (U Illinois Urbana Champaign)

Do you think that taking a global perspective is relevant in dealing with issues of relevance to international economic policy or sustainable development goals? If so, this paper invites you to consider to what extent you have achieved this in your teaching of economics.

We shall illustrate how we have approached this problem, using a COIL (collaborative online international learning) framework. COIL is a relatively recent term introduced to describe cross-border collaborative initiatives in higher education. While encouraging learning with a new perspective, it capitalises on online interaction between students and instructors in a global setting. COIL promotes joint projects, discussions, and assessment, and is an opportunity for collaborative subject learning and feedback.

While classrooms in advanced economies' higher education include staff and students from around the world, the perspectives we take are often shaped by the location of our institutions. The widespread experience of online learning has partially dissolved the real boundaries for finding global solutions to global concerns and thus calls for alternative platforms to enhance our debates. By extending the use of COIL we can capitalise on local knowledge while harnessing the potential of global communication systems.

International research networks have allowed many academics to travel across borders and are supplemented by exchange agreements for international students' mobility. For all the benefits that in person interactions have brought to date for many, they have left many more behind where limited access to resources provides few chances for most students to have their voices heard in the global arena. Yet, the points of view of those 'left behind' could be precisely the voices that we need to solve global problems with differentiated local impact.

We reflect here on the use of COIL as a tool in teaching a variety of economic topics of cross-border relevance. We illustrate how COIL has been employed to bring together students discussing global economic issues – from environmental concerns to international trade, based on a three-country partnership involving universities in the UK, Spain and the United States. We will present the challenges and opportunities this pedagogical tool has uncovered: from matching topics and curricula, to reflecting on how outputs bring value added to the learning and assessment process.

Any COIL activity involves an ongoing process of communication between educators and administrators, in diverse educational settings. In our case, instructors at three different institutions have sought out common ground towards joint educational activities and curriculum matching. We set out by uncovering common topics in our curriculum, coming from somewhat different perspectives in economics or political economy.

Thus, at their home institution students at the University of Illinois at Urbana Champaign are introduced to topics in 'Environmental Economics', at an intermediate level. They build on relevant theory, applying economic analysis to topical issues such as pollution, climate change and overpopulation. Within the COIL they acknowledge these as global problems, while exploring data and seeking synergies and regulatory solutions through cross-border dialogue with students in partner institutions. The course offered by the University of Navarra engages learners with various dimensions



of globalization, development, trade or climate policy, whereas sustainability acts as a unifying theme. Students would have been introduced in advance to the central dimensions of sustainability, going out from a "3Ps" framework involving 'prosperity, planet, people.' Yet, the learners' general background in economics makes all familiar with the first dimension- of prosperity. Our COIL allows for the extension of discussions to the other two dimensions, bringing an enhanced, global perspective. The University of East Anglia module on 'International Trade and Integration' adds a group of students familiar with introductory micro and macroeconomics tools. They analyse global economic questions, while linking their understanding of global flows of goods with environmental concerns and the concept of a circular economy introduced through COIL lectures. While observing international negotiations towards a sustainable environment, students negotiate their own learning on the topic, and get familiar with the challenges of co-ordination in an international setting.

Essentially, we have built through COIL a common ground for students to develop a critical understanding of economic realities and consider tools promoting global dialogue towards a sustainable economy. This COIL involved a set of synchronous and asynchronous activities, stretching over eleven weeks. We started out with an introduction to the COIL and its common themes in a joint online session involving some 200 students. For two of our institutions, participation in the COIL was optional, and for one of the institutions it was built in as a core activity of the curriculum- allowing for the observation of different engagement patterns by learners. COIL participants committed to stay involved over the duration of the collaboration, as they engaged in a joint research project within mixed groups of students from international partners. That included inter-cultural communication and learning, along with the additional challenges of co-ordination. An assessed presentation of their joint findings was followed by discussions, set up on the piazza.com online platform. The cca 40 students ultimately involved in this part of the collaboration benefited from joint feedback from all three tutors. While aligning marking criteria and feedback, tutors could ultimately enhance their own learning and pedagogical practice.

Note: You can access a selected students' collaborative project output from this COIL under the NEP publications podcast series.

### [Economics teaching in the post-Covid classroom](#)

Alice Cahill, Christine Cross, Danielle Guizzo, Simon D. Halliday, Annika Johnson, and Christian Spielmann (University of Bristol)

The COVID pandemic has resulted in dramatic changes to teaching and learning. Instructors all over the world have tested a variety of technologies and techniques that they might otherwise not have experimented with, and they now face the question whether any learning approaches implemented during the pandemic have worked well and should be preserved into the future, and, if yes, how to best embed them into their teaching.

Our research looks at how students perceived the adjustments in teaching and learning and whether some of them may have the potential to shape post-pandemic learning and teaching.

We are interested in the students' voice as there is an increasing focus on students as partners and co-creators for pedagogical innovation and curriculum design in higher education (see Bovill, Cook-Sather, and Felten 2011; Halliday 2019).

We conduct interviews with small focus groups of students (9 focus groups with a total sample size of n = 61) in which students participated in guided interviews where they addressed a variety of

questions that the researchers chose based on the literature. Students also had opportunities to introduce ideas not proposed by the researchers in a more open-answer type context. We performed a textual thematic analysis of the anonymised interview transcripts.

The results suggest that students have found many of the practices adopted since the pandemic to be beneficial to their learning, in particular the opportunities for more flexible learning around work and care duties. At the same time, students also believe that in-class instruction is crucial and that they would like more access to the main instructor of courses, rather than only access to teaching assistants (or tutorial leaders) in small-group teaching that often accompanies the larger lectures which may be supplemented by the on-line learning materials.

More specifically, students appreciated the opportunity to engage anonymously in chats and discussion boards, saw the increase of in-class polling as ‘sort of a nice break’ and thought that recordings of live sessions can help learning and increase accessibility. Furthermore, students mentioned that the pandemic has made them more independent learners and taught them how to use external materials to supplement their learning. Finally, students seemed to have realised how learning is social, and comment strongly on the importance to create meaningful interactions with their peers inside and beyond the classroom.

If we conceive of current structures of teaching in economics as forming a paradigm of “chalk and talk” (Asarta, Chambers, and Harter 2021), then the COVID pandemic may have provided what Thomas Kuhn calls an anomaly or crisis for existing forms of economic instruction which provided a critical juncture for economics education because it offered an exogenous force that resulted in dramatic changes to instruction and learning that may not have existed otherwise. Our research gives a first insight into how students perceived new learning approaches introduced during COVID. Going forward we would like to confront the student comments with the instructors’ perspectives and the educational literature and create the foundation for a conversation between instructors and students about effective and student-centered learning approaches in a post-pandemic world.

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Tuesday 9:00 – 10:30 James Watt Hall

## Teaching data analysis and econometrics asynchronously with social media and peer support

Mathilde Peron, Lilian Joy, Michael Thornton, Annabel Tompson (University of York)

The paper discusses how some of the social learning opportunities of live computer lab sessions can be replicated through social media and peer mentor support. Economic Data Analysis (EDA) and Econometrics are two core first- and second-year modules, with around 200 Economics students each at the University of York. Both modules are assessed with an individual project for which students need to be proficient in Excel and Stata. Before 2020, conceptual lectures were complemented with practical computer sessions held in person in dedicated labs. These sessions can offer valuable, interactive resources for demonstration and experimentation. However, computer labs tend to be expensive, tightly rationed and crucially were largely unavailable for about two years over lockdown.

Since the pandemic, computer sessions have been replaced by asynchronous activities supported by step by step videos recorded by lecturers as well as access to external resources such as Core Doing Economics. Practical sessions for EDA were also re-designed according to well-researched pedagogical principles, such as motivation via real-world problems and work in small groups with assigned roles (Yilmaz & Karaoglan, 2019) facilitated by an initial socialisation activity. Lecturers also used various institutional tools to promote social interaction (VLE discussion boards, Padlets and online quizzes).

Students' feedback on pre-recorded videos was overall positive, mainly because they can work at their own pace and re-access the material when working on their summative project. Nevertheless, engagement was limited, with especially little uptake of the socialisation and peer support activities. We also observed a gap between what students said they wanted (taken from module feedback and the Jisc (2021) report) and what they actually did. For example, students said they wanted more small group support but when these opportunities were organised, they worked on their own as individuals rather than working as a group.

Brown et al (2020) argues that having to learn university-specific tool sets can be a technological barrier for engagement, making online interactions 'unproductive and stilted' (Jisc, 2021). The Beyond the Lab (BtL) project was thus created, aimed at peer support for students with social tools familiar to them, such as Instagram and TikTok. The project was funded by the Royal Economic Society over the academic year 2021/22 and consisted of three main activities:

1. Recruiting four student mentors to act as content producers and community managers;
2. Producing social media content on Excel and Stata, reminders about upcoming deadlines and community-oriented posts;
3. Creating opportunities for peer-support with two in-person workshops and direct messaging.

We hoped the combination of social media and peer-support might be a good replacement for the communication dynamics of the traditional lab sessions and enhance blended learning, improve student engagement and help students feel supported and part of a learning community.

Working in pairs, the mentors created content they thought would engage the students. These included simple videos to introduce themselves and to create a welcoming presence, tips and 'hacks' on using Excel and Stata, and messages that served as nudges. Overall, 43 posts were created with 162 followers over 10 weeks. Interestingly, even posts where mentors recorded themselves speaking

to the camera were viewed a significant number of times. The student mentors also ran two in-person sessions to supplement their online presence, attended by about 10 students in each session.

Data was collected through student surveys and focus groups with the students, the mentors and the lecturers. The paper discusses the findings of the project and offers suggestions for how to implement the ideas in a sustainable way. By taking into account their preferences for viewing shorter videos, using their own familiar social tools and having students as active partners, the paper argues that the department has moved closer to improving inclusion, diversifying participation opportunities and meeting student expectations.

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## Adventures in pair programming

Annika Johnson, Anastasia Papadopoulou & Stefania Simion (University of Bristol)

We developed and piloted a novel data visualisation workshop, giving students the opportunity to learn Python through a combination of pair-programming and specially designed cheat sheets to create a supportive and highly social learning environment for both undergraduates and postgraduates from a range of disciplines. Over five days, students were able to work together to progress from basic arithmetic commands all the way through to independently downloading data sets and visualising them using Python in Google Colab. The aim of the event was threefold: (i) to enhance employability by providing students with the opportunity to develop hard programming skills not included in their regular programme of study; (ii) to provide a rare and vital opportunity for community building by allowing students to embrace uncertainty and collaborate on an authentic data project; (iii) to learn how pair programming and cheat sheets can be used jointly to facilitate learning of data analysis in new languages, a skill of increasing importance in applied economics courses.

This project evaluates the pilot workshop, using the daily assessment points (MCQs and Colab notebooks) to understand technical progress alongside textual and sentiment analysis of the daily qualitative surveys to better understand how each student perceives their progress, project materials and the pair programming learning experience. The findings can be used to inform not only effective design of Economics challenge events based on authentic industry tasks, but also the use of cheat sheets and pair programming with teaching on data focussed modules, where large cohort sizes often present a challenge for building community and informal peer support networks.

## The effect of a flipped classroom where students work on exercises in groups during class time

Yasukazu Ichino (Ritsumeikan University)

A flipped classroom is an active learning method that “flips” a traditional lecture, moving the lecture out of class time and bringing the homework activities during class time. In order to examine the effect of flipped classrooms on student learning in comparison with traditional lectures, we implemented an experiment in the two sections of the course of “introduction to economics” in a private university in Japan.

Key features of our experiment are that it was a randomized controlled trial of flipped classrooms and that it was conducted in large-sized classes having around 180 students. These features are in contrast to the previous studies, most of which are observational or quasi-experimental, and have examined the effects of flipped classrooms for small- to medium-sized classes having less than 50 students. Another important feature of our experiment is that the unit of experiment is not sections but lessons. Specifically, in our study, instead of the two sections being separated into a traditional lecture section and a flipped classroom section, both traditional lectures and flipped classrooms were provided in each section, with traditional lectures and flipped classrooms applied to different lessons in each section. In this setting, all students who participated to the experiment attended both traditional lectures and flipped classrooms. This was to mitigate the bias arising from the subjects’ behavior in meeting the experimenter’s expectations.

In our experiment, each lesson consists of the three components, a lecture, a set of practice problems, and a quiz. In the traditional-lecture format, the instructor gave a lecture during the class using slides. After class, the students were required to work on a set of practice problems on their own. They took a quiz at the beginning of the next class. In the flipped-classroom format, students were asked to watch video lectures before class. The video lectures consisted of the same slides used in the traditional lectures. During class, students worked on practice problems, which were identical to those given in the traditional lecture format, in randomly assigned groups. They took a quiz at the end of the class time. By this setting, the treatment effects of the flipped classrooms arise mainly from stronger incentives for the students to watch video lectures before class, and from discussion with classmates during class.

The objective of this study is two-fold. First, we examine the effect of the flipped classroom on student learning outcomes, learning efforts, and satisfaction. Here, the learning outcomes are measured by quiz and the final exam scores. The learning efforts are proxied by attendance, completion rates of watching video lectures, submission of questions to the lectures, and submission of the answers to the practice problems. Second, we investigate the direct and indirect effects of the flipped classrooms on the learning outcomes through the learning efforts by conducting causal mediation analyses.

The main findings regarding the effects of the flipped classrooms on learning outcomes, learning efforts, and satisfaction are as follows. The flipped classrooms have a positive effect on short-term learning outcomes. The average quiz scores of the students who had the flipped classrooms are statistically significantly higher than those of the students who had the traditional lectures by about 0.16 to 0.29 standard deviations. The positive effect of flipped classroom is stronger for the students with positive attitudes toward group learning. In fact, for the students with negative attitude toward group learning, the flipped classrooms have negative effect on their quiz scores. However, we found no statistically significant effect of the flipped classrooms on the long-term learning outcomes measured by the final exam scores. On learning efforts, the flipped classrooms have statistically significant positive effects. We also found that the students are less satisfied with the flipped

classrooms than with the traditional lectures. This can be partly because more preparation is required in the flipped classrooms than in the traditional lectures.

The results of the causal mediation analyses are as follows. The mediation effect of the flipped classroom on quiz scores through submitting questions about the lectures before class is small and statistically insignificant. On the other hand, when video of the effects of flipped classrooms on quiz scores, about 70% is the mediation effect through watching video lectures, and the remaining 30% is the direct effect, where both effects are statistically significant. With interpreting the direct effect as the effect of in-class group discussions, we consider this as suggestive evidence that both watching video lectures before class and discussing with classmates during class are important, with former having a larger effect than the latter.

Tuesday 9:00 – 10:30 Craig Room

### The Xs, the Ys, the Zs: Challenges in internalising generational gaps in teaching

Katerina Raoukka and Andri Kyrizi (University of Cyprus)

There is growing evidence that generational characteristics influence learning. Generational differences play a catalytic role in the learning process. The needs of the current learners, Gen Z, ought to be matched by their instructors, the majority of whom belong to, mostly, generation Y (the millennials) and to generation X. More recently, the generational aspect became a concern as instructors notice that traditional modes of teaching do not encourage student participation. Evidence shows that, in the United States, the primary method of introductory economics is the traditional chalkboard/whiteboard with material and textbooks that had not changed over 25 years.

Most research focuses on millennial characteristics and learning habits. However, there is relatively limited research on the Gen Z approach to teaching and learning. As this generation enters the labour market and employers find it hard to work with them the characteristics of Gen Z ought to be internalised in education which should in turn provide them indispensable employability skills.

This project presents a teaching innovation developed to entice students into the study of economics by bridging the generational gap between instructors and Gen Z students. Traditionally, the 'Principles of Macroeconomics' course followed a teacher-centered approach, relying heavily on slides and multiple-choice assessments, resulting in disengagement and poor student interaction. In response, a teaching grant was secured, allowing for a comprehensive restructuring of the course to incorporate Gen Z characteristics and learning styles.

The restructured course retained the existing curriculum but adapted the sources of information and materials to align with Gen Z preferences. Three significant changes were implemented: a mid-hybrid teaching approach that allowed for flexible and independent learning, leveraging Gen Z's digital proficiency by incorporating video creation as an educational tool, and integrating politically and socially progressive assessments to encourage reflection on economic issues.

To assess the effectiveness of the innovation, focus groups and qualitative research were conducted to gauge students' experiences and perceptions. Preliminary results indicate that students appreciated the challenges offered by the course and found the independent learning approach exciting.

This teaching innovation holds promise not only in economics education but also offers valuable insights for instructors in other disciplines looking to engage Gen Z students effectively. By embracing the characteristics and preferences of this generation, educators can create vibrant learning experiences that foster interest and participation, ultimately improving students' understanding and communication with their instructors. Further research and evaluation will be conducted to establish the long-term impact of these teaching methods on students' economics knowledge and overall learning experience.

### Empowering students for active economic citizenship: Enhancing financial proficiency through experimental learning in a university with a focus on diversity and inclusion

Ekaterina Ipatova (University of Roehampton)

This paper presents a project aimed at enhancing the financial proficiency of Business School graduates to empower them to become active economic citizens with the ability to make rational financial choices, take financial responsibility, and develop financial independence. While academic institutions provide extensive finance knowledge, they often fail to offer sufficient opportunities to train financial proficiency and modify financial behaviors. The paper examines the application of Experimental Learning Theory, which focuses on developing the ability to apply financial knowledge to achieve desired financial outcomes. The theory involves a cycle of concrete experience, reflection, and conceptualization of knowledge to form a framework.

Nowadays, university students are entering adulthood in a period of increased complexity of the financial products on the market. Poor financial decision-making can have significant costs, especially for disadvantaged students who may have limited numeracy skills and experience math anxiety.

Therefore, the development of financial proficiency is a key objective for universities that prioritize diversity and inclusion to enhance students' standard of living and improve social mobility. This paper presents a case study that employs Experimental Learning Theory to enhance pedagogy and achieve financial literacy as a learning outcome. The study involved surveying over 100 students to determine their current financial knowledge level, numeracy skills, as well as their goals and strategies to improve their social mobility.

## Assessing the impact of peer evaluation in assessed group work

Jon Guest and Robert Riegler (Aston University)

The use of assessed group work in large modules continues to raise significant challenges. Although the pedagogic benefits have been widely discussed in the literature, students often express reservations about its use on their courses. Where assessed group work is used, many students argue that it should be designed so that the individual marks awarded closely reflect any variations in the contributions of different team members.

To address this issue, a teaching team on a large first year module taken by economics students implemented a peer evaluation scheme into a group assessment. To complete this activity, the students had to make evaluative judgements about the contribution of their team members and provide numerical scores (effort points). A fixed-point scheme was employed where students had to allocate 100 effort points between their team members. Therefore, if the group size was six and a student believed that their fellow team members made equal contributions then they would award each of their peers 20 effort points. The tutors used these scores to adjust the group mark into individual grades.

One particular concern when using this type of scheme is the validity and reliability of the evaluations. For example, do the students have the skills to make these evaluative judgements and are their evaluations subject to biases?

To investigate this issue, focus groups were undertaken. One key theme that emerged was a belief that collusion between intra-group friends during the peer evaluation process had significantly biased the marks. The following is a representative response:

“In a group of 5 people and you have 2 people who do absolutely no work, but they’re best friends or they made friends during the module, they have the possibility of giving each other full marks and giving people who have actually done the work 0.”



Following the results from this qualitative research, the tutors introduced detailed criteria to help guide and support the students with the peer evaluation activity. This research uses quantitative techniques to assess the impact of this intervention. More specifically, we test the following two hypotheses:

Hypothesis 1 – The intervention reduces the variation in the scores that one team member receives from their fellow group members.

Hypothesis 2 – The intervention reduces the strength of the relationship between the evaluation score a student awards a fellow team member and the score they receive from that fellow team member i.e. the level reciprocity.

## Results

Rather than the level of variation falling, we actually found evidence that the variation in the scores that one team member receives was actually larger in the 2022-23 cohort. This suggests that either (a) the intervention did not have the intended impact or (b) changes to the assessment influenced the results.

To test the second hypothesis, we adapted an approach used by Magin (2001) that analyses the data at the pair level, i.e. the observational unit is the combination of effort points students  $i$  and  $j$  award one another.

We did not find evidence of reciprocal behaviour in the majority of cases. The percentage of pairs where either both or one student gave an equal contribution score were 75 and 70 per cent in 2021-22 and 2022-23 respectively. Positive reciprocity, where both students gave each other an effort point score greater than the equal contribution level, occurred in 17 per cent of the pairs in both cohorts.

Rather than collusion, positive reciprocity may simply reflect two harder working members in a group awarding each other higher scores. To control for this, we employ a relative measure of reciprocity. This indicates that approximately 30 percent of the cases of positive reciprocity could be caused by collusion.

## Conclusion

The analysis of the data indicates that the intervention was not successful and scoring consistency did not increase.

There was some evidence of positive reciprocity, but it was not widespread. Using a relative reciprocity measure, our analysis suggests a potential rate of collusion of five percent across the whole sample. This figure was the same for both cohorts.

One advantage with our measure of relative reciprocity is that it can be applied to smaller groups sizes and where there is no variation in the scores a team member awards their peers. One weakness is that the measure fails to identify cases where multiple pairs within the groups are colluding. One challenge moving forward is to find a reliable way of isolating evidence of collusion from within the positive reciprocity data.

Tuesday 9:00 – 10:30 Gibson Room

## Pay dynamics of work placements: The case of economics graduates

Panagiotis Arsenis (University of Surrey) and Miguel Flores (National College of Ireland)

Students in higher education (HE) are increasingly under pressure. According to a recent survey carried out by the Office for National Statistics, around half of students in England reported financial difficulties and 30% had taken on new debt due to the rising cost of living (ONS, 2023). In addition to such financial stress, entry into the graduate labour market is competitive. Nowadays, an undergraduate degree shows that job candidates have the foundational academic knowledge and skills to apply for graduate jobs, but this might not be enough to secure a job that is aligned with their career aspirations. HE has evolved into an increasing participation of young people into undergraduate programmes, with HE entry rate among UK 18-year-olds increasing from around 25% in 2006 to around 38% in 2022 (UK Parliament, 2023). Also, a recent early careers survey found that a lack of work experience is a key obstacle to applying for jobs and close to one in two students did not feel prepared to get a job. From the employer point of view, as well as the degree requirement other selection criteria are relevant to hire graduates, like work ethic and attitudes, transferable skills or other indicators of employability and work experience (Department for Higher Education, 2019). Employers typically report that graduates are not “job-ready” when they enter graduate employment, often lacking work experience, the ability to communicate clearly in writing and wider application of knowledge (The Economic Network, 2019).

In this challenging and uncertain graduate labour market context, universities have adopted different curricular approaches to help students in their transition from university to work. Among them, work-based learning in the form of work placements which are part of undergraduate programmes (also known as “sandwich” degrees) allow students to add real-world experience to their academic qualifications, enhance their employability, and help them improve their career prospects. At the same time, many employers progressively use internships and work placements as a recruitment channel, with around 50% of interns and placement students being recruited into graduate jobs by the same employer (Institute of Student Employers, 2022).

Despite the increasing popularity of work placements in HE, and the growing literature studying the potential benefits of such programmes on graduate employability, there is a lack of empirical research on the mechanisms through which work placements can benefit students. The literature on this field typically carries out static analysis by looking at graduate outcomes’ differentials, like earnings, between placement versus non-placement graduates using surveys at specific points in time. However, little is known about the dynamics of transitioning from university to the labour market. We aim to fill this gap in the literature. Specifically, there is limited evidence on the potential benefits for graduates who continue working for their placement employer. It is in the interest of both students and HE institutions that support students as they transition from the educational to the professional context to better understand these work placement dynamics.

This study explores the pay dynamics of work placements by examining the existence of a “foot-in-the-door” effect of placement graduates who remain with the same employer, as well as the persistence and stepping-stone effect of low-pay placements. Our sample consists of three recent cohorts of economics graduates who did work placements while studying at a UK university. We control for a wide set of possible factors, including students’ demographic characteristics, academic achievements, job experiences and other accomplishments as well as graduate job industry characteristics. We

employ three different models; an OLS and quantile regression model to capture the foot-in-the-door effect, and an ordered logit model to capture the low-pay persistence and stepping-stone effect. Our OLS results reveal the presence of a highly statistically significant and positive foot-in-the-door effect. Specifically, our most accurate estimate suggests that placement graduates who were recruited by their placement employer earned on average 10.2% higher salaries than their peers recruited by a different employer. In addition, the quantile results show that the foot-in-the-door effect is even stronger at the top end of the graduate salary distribution. Regarding the low-pay persistence and stepping-stone effect, our results show that they are both present and favour graduates recruited by the placement employer. That is, same-employer graduates are less likely to remain in a low-pay job and more likely to transition to a higher-pay job than different-employer graduates. Overall, our findings highlight the graduate job opportunities that work placements offer and their objective benefits, and have important implications for the HE sector, especially regarding the emphasis that should be placed on developing strong partnerships with businesses.

## Diversity and human capital accumulation in higher education

Anthi Chondrogianni & Ahmed Pirzada (University of Bristol)

Students from underrepresented backgrounds need to overcome additional obstacles which affect them disproportionately when it comes to employability outcomes (Thomas and Jones, 2007). We collect primary data for the academic years 2020 to 2023 from the second-year undergraduate students at the School of Economics, University of Bristol, to better understand how students' backgrounds affect the process of human capital accumulation during their first year of studies. The dataset also allows us to investigate if different student groups were disproportionately affected by the Covid-19.

We first study differences in the acquisition of work experience across gender. Our data shows that 30% of the female students have acquired some work experience by the time they reach the second year of their studies. This is significantly higher than the 19% for male students that acquire work experience.

The gender gap holds when we use our survey data to estimate the regression model. Male students are less likely to secure experience during the first year of their studies. Importantly, this result holds even after we control for degree programmes and student engagement with careers related activities such as attending the careers fair, visiting careers service website, and more. However, we don't find the gender gap to be significant when we focus on whether the experience is full-time or paid. While male students are more likely to get paid experience, the difference is not statistically significant. In the case of full-time experience, the difference decreases and becomes statistically insignificant after we control for engagement with careers activities.

Our results are similar in the case of home and international students. International students are more likely to acquire experience during the first year of their degrees. The gap remains statistically significant at 1% significance level even after we control for degree programmes and engagement with careers related activities. International students are also more likely to get paid experience during their first year. However, after we control for engagement with careers activities, the point estimate decreases and becomes statistically insignificant. In contrast, there is no evidence for a gap when it comes to full-time and part-time experience. It is important to note that the question on type of work experience was optional and the sample size is small. Therefore, the results for full-time and paid experience should be read with caution.

The last wave of the survey also included questions on students' grades during their first year of studies. The question on grades is intended to capture differences in students' academic abilities and the trade-off between time spent on studies and acquiring work experience. We expect to find a positive relationship between grades and experience if students' ability dominates. In contrast, we expect a negative relationship in case of a trade-off between academic performance and experience.

Our results do not change when we control for grades. Both the gender gap and the nationality gap continue to exist as before, suggesting that the ability and trade-off channels offset each other. However, while the point estimate remains almost similar, the coefficient on the gender gap becomes statistically insignificant after we control for both grades and engagement with careers activities.

Finally, we find that Covid-19 led to a 6-percentage point drop in the number of students who were able to acquire work experience. The effect on both male and female students is not statistically different. However, there was a 12-percentage point drop for international students, compared to the 4-percentage point for home students. Within the home and international cohorts, home female and international male students were most affected. Interestingly, we find that the gender and the nationality gap during the Covid year was no longer statistically significant.

### Working while studying: an exploration of the drivers leading students to seek employment over the course of their degree

Laura Harvey, Fabio Arico & Ritchie Woodard (University of East Anglia)

Recently, higher education (HE) providers in the UK have registered an increasing trend in the number of students seeking part-time employment while studying. At the same time, wider access to HE increases the competition for graduate-level employment, leading students to seek opportunities to signal work-readiness through employment experience on top of their degree qualifications. The current cost-of-living crisis has also disproportionately affected students. Whilst there is broad acknowledgement of the challenges faced by university students, little research (particularly outside of the US) has been conducted to explore the motivations that lead students to work while studying. This paper tackles this issue from a student perspective, through extensive surveying of the student population at a mid-size British university. Our methodology builds on quantitative and qualitative questionnaire-driven data collection and analysis. We develop a framework that can (i) generate valuable information for universities to understand and respond to student needs, and (ii) be easily scaled up to other HE institutions, to inform the HE policy debate. The first objective of our investigation is to assess the relative importance of three drivers for working while studying: (i) working for necessities, (ii) working for immediate wants, and (iii) working for future employment. The first two drivers encompass issues with the increasing cost of living, and with the willingness to expand purchasing power to afford a better lifestyle during studies. The third driver explores motivations linked to curriculum building and employability, such as gaining practical skills, experience, and/or an internship. Using the built dataset, we can analysis these factors for different demographic groups.

Tuesday 11:00 – 12:30 James Watt Hall

## Evaluating the impact of fees on student satisfaction through the NSS

Steven Proud & Stefania Simion (University of Bristol)

In 2012, tuition fees were increased in England from £3,000 to £9,000. However, the impact of this increase in fees on overall student satisfaction has not been widely investigated. One key exception is Burgess et al (2018), who evaluate the overall impact across all subjects, using a difference-in-differences methodology, with Wales and Scotland (which did not experience increases in fees) as controls.

In this paper, we examine the impact of the increased fee levels on student satisfaction in Economics, and provide comparisons with other subjects, including sciences and arts to evaluate whether there are differences in sensitivity to fees and their impact on satisfaction. We use two main methodologies; firstly, we replicate the approach used by Burgess et al (2018), using Wales as a control. However, this is likely to be biased towards zero, due to the fact that some English students (who experienced the increase in fees) attend Welsh Universities.

It should also be noted that Burgess et al (2018) face a second bias, which is that they evaluated the introduction of higher fees occurring at the same time across programmes. However, many programmes are longer than the standard 3 years, and so the treatment across programmes will again be biased towards zero, due to the lack of co-ordination of timing. To address this, we seek to use the heterogeneity in timing of increased fees feeding through into the NSS within institutions across different programmes to evaluate the impact of the increased fees. Finally, we seek to evaluate whether higher fees make students more sensitive to shocks, such as strike action, in economics.

## The forgotten research academics: The academic career structures of research academics within business schools in teaching focused institutions in the UK

Laura Muncey & Denise Hawkes (Anglia Ruskin University)

Much of the literature on the academic careers is based the underlying assumption that research focused academics are based within Research Intensive Universities. Within UK Higher Education, increasing numbers of research focused academics are found within Teaching-Focused Universities.

This poster will focus on the career implications for research academics based within Business Schools in the University Alliance (UA) Group Institutions. The UA consists of 14 universities in the UK, all post-92 teaching focused institutions with a focus on being a local, civic university and widening participation agenda. UA Business Schools have focused on impactful research and rely on their research active academics to support their REF ambitions as well as expecting them to contribute significant teaching loads. With the REF 2020 results reported, it is timely to consider the career implications of research academics and will provide insights into the potential implications for career enhancement of the changing REF rules.

The key research questions are:

- (1) How do research academics navigate the Business School environment in terms of their research

- (2) How do research active academics maintain their research within teaching focused, local, civic universities?
- (3) What impact do the Business School priorities, such as REF UoA 17, Triple Crown, ABS journal ranking and Small Business Charter, have on individual research academics research interests?
- (4) How does research academic navigate the university promotion processes within a Business School context?
- (5) Are female and BAME research academics equally successfully in these institutions as white, male economists?

### Advancing the teaching of economics: An international study of economics faculty positions focused on teaching and the scholarship of teaching

Tisha Emerson (Baylor University, USA), Fabio Arico (University of East Anglia, UK) Alvin Birdi (University of Bristol, UK) Avi J. Cohen (York University, Canada) Caroline Elliott (University of Warwick, UK) Gail Hoyt (University of Kentucky, USA) Cloda Jenkins (Imperial College London, UK) Ashley Lait (University of Bristol, UK) Jennifer Murdock (University of Toronto, Canada) Christian Spielmann (University of Bristol, UK)

Career track teaching positions in economics have seen increasing prevalence over the last two decades and provide an intriguing career alternative to traditional research positions. While there are many similarities in the way how these positions are structured and how staff perceive their roles, there are striking differences across countries.

This research aims to describe the landscape of career track teaching positions in the US, Canada and the UK, learn about the perceptions of economists in these positions, and discover successes, challenges and opportunities of career-track teaching positions.

This research is a multi-stage study of economists in career-track positions in the three countries. We report findings from 70 interviews and 104 responses of a pre-interview survey. Data from a comprehensive survey in the US, UK and Canada are currently analysed and will form the second part of this research study. The interviews were analysed using a thematic textual analysis.

Career-track teaching positions in economics are relatively new, compared to more traditional research positions. We found that the degree these positions are formalized differs across countries and institutions. Often a first generation of pioneers have been able to shape those positions in their departments and schools. However, a lot of vagueness about the criteria and job purpose remains. It is perceived that the positions are more fragile than traditional academic roles, and that the experience of staff in such positions can be dependent on university and departmental leadership. We identify examples for excellent integration of teaching-track positions into departments, but at the same time participants reported challenges around inclusivity and departmental culture. We research the degree and the different spheres of influence teaching-track academics can have on departments and on educational policies, some of them being formal and others informal. We also report on the perceived impact made by teaching-focused staff, which ranges from the direct impact on students and efficient allocation of departmental resources, via the provision of pedagogy training to curriculum development. Workload is mentioned regularly, and we shed light on the particular challenges around time management.

The way teaching-focused positions are organised differs across countries. In our research we report on advantages and challenges of the tenure system in Canada, the softer job-security and informality

of positions in the US, and the importance of administration, leadership and scholarship of teaching and learning in the UK.

The research is a step forward to better understand similarities and differences of teaching-focused positions in economics, both within and across countries and to foster a fruitful discussion about how to optimise the impact of teaching-tracks in economics and the experience of those within such roles.

Tuesday 11:00 – 12:30 Craig Room

### Common ground: Using authenticity to make connections in teaching

Michael Reynolds & Stacey Mottershaw (University of Leeds)

This session will outline a work-in-progress project exploring the (un)importance of authenticity in teaching, with a focus on higher education settings. Despite authenticity in teaching being a complex and contested term, staff are increasingly asked to present an authentic teaching identity, ostensibly to improve student engagement with teaching and to enhance a sense of belonging (Johnson and LaBelle, 2017). Little attention has been paid to whether underrepresented staff feel that they can be their authentic selves in the classroom. The vulnerability that the practice of authenticity entails and the burden that this places on staff to find the balance between authenticity and credibility (Brookfield, 2015) has not been explored, particularly in the context of under-represented staff whose experiences may be characterised by a sense of unbelonging (Wren Butler, 2021). The project runs across two phases: phase one explores staff and student perceptions of authenticity and the importance of it in teaching via four focus groups (two with staff and two with students). Phase two will involve a series of semi-structured interviews with academic staff who identify as under-represented, to explore their experiences of practising authentic teaching. The focus group data and interview data will be examined using Thematic Analysis. This paper will outline the project and facilitate critical dialogue with conference delegates on their own experiences of authentic teaching, which will in turn influence the design of phase one and phase two.

### Exact, information-dense graphs for economics lectures and assessments: why and how?

Luc Bridet (University of St Andrews)

I discuss numerically exact graphs defined by precise parameter values and functional forms. These differ from free-hand or illustrative graphs, which are far more common in textbooks. A typical example is a consumption-leisure trade-off graph with multiple agents, multiple budget constraints and multiple sets of indifference curves: [dropbox.com/s/hle3dm36ir9bmb0/Figure3.svg?dl=0](https://dropbox.com/s/hle3dm36ir9bmb0/Figure3.svg?dl=0).

I argue that such graphs are a valuable addition to instructors' toolkits for both lectures and assessments, enabling to convey the rigour of formal economic modelling to undergraduates, and assess students' understanding of formal models, while outsourcing all the computational burden to the instructor.

In lectures, exact graphs support extended numerical examples which can be easier to understand and less abstract than extended discussions based on formulas. As a case study, I present an extended numerical example of linear income taxation where the proceeds of taxation are rebated in the form of a universal basic income, with two agents types and identical preferences but heterogeneous productivity. A single consumption-leisure trade-off graph is enough to illustrate the distortionary effect of taxation, income and substitution effects, budget balance, the elasticity of the tax base to the tax rate, and the intensive vs extensive margin response of labour supply. This activity can also be continued through a related graph, presenting the utility possibility frontier generated by varying the tax rate and introducing the planner indifference curves generated by social welfare functions (e.g. utilitarian and maximin), formally presenting the trade-off between efficiency and redistribution in a



form that is instantly recognisable by students of economics, as it involves maximising a preference over a constrained budget set.

The activity can be a lecture or a live problem and the graphs can be annotated sequentially while covering all the concepts. This mode of content delivery is effective, requires a relatively low upfront investment in notation and terminology, while still benefiting from the rigour and precision of formal modelling. Students do not need any mathematical tools beyond graphical constrained optimisation and elasticities. I generalize from these observations and discuss the benefits of this approach to content delivery.

Exact graphs can form the basis for extremely effective and authentic assessment, with the following features: (1) testing directly understanding of models and requiring all definitions to be adapted to a specific context, (2) requiring no computational steps beyond coordinate readings and simple adding and multiplying, (3) relatively easy to mark, and (4) difficult to answer by pure pattern recognition or by artificial intelligence tools.

As a case study, I present a first-year exam problem covering taxation, universal basic income, and income and consumption Lorenz curves. In line with the delivery and technical requirements of the CORE textbook, students do not need any mathematical tools beyond graphical constrained optimisation and elasticities. I explain how the use of such graphs enlarges the set of learning outcomes which can be assessed satisfactorily.

I then discuss techniques for creating exact graphs and ensuring accuracy and readability while using freely available and user-friendly software, as well as the challenges of preparing students for the use of graphical methods.

## Does online engagement improve students' performance: Empirical evidence of economics module at the University of Sheffield International College during the COVID19 pandemic

Uzma Ahmad (University of Sheffield International College)

This paper investigates the association between students' online engagement and their performance in a HE (level 6) compulsory module of Economics (Pre Masters). The data for this study comes from a unique purpose-built student online survey (282 students) collected from the University of Sheffield International College (USIC) in England. The dataset is also matched with administrative data of college to access students' performance records.

Students' performance is measured from their end-of-term summative assessment score in that module. Quantitative method: Multiple Regression analysis is used to identify the relationship between students' engagement and performance. The findings of the paper show a positive and significant relationship between online engagement (performance in formative assessments and use of discussion board) and performance (end-of-term score). To sum up, this study also provides useful insights as to what works best for students regarding their engagement.

Tuesday 11:00 – 12:30 Gibson Room

## How Diverse is Your Reading List? An Analysis of BSc Economics Curriculum

Dunli Li, William Nguyen & Aureo de Paula

There has been wide discussion in both academic literature and public debate on diversity and inclusion across different disciplines. Gender and ethnicity imbalance in Economics has been a long-standing issue. Increasing attention has been paid to both demand-side and supply-side barriers to diversity in economics.

In this study, we look into the BSc economic curriculum in a top UK university and analyse data on gender, ethnicity, and geographic location of the authors in the essential reading lists for all BSc economics modules and examine their relationship with the characteristics (gender, ethnicity) of module leaders who assign the readings. We find strong evidence that the essential reading lists are dominated by white male authors based in North America or Europe. Specifically, we collect data on 526 assigned essential readings in all BSc modules and find that among all authors of these readings, around 82% are male, 87% are white, 55% work in North America and 40% in Europe. The results suggest that modules with female lecturers or mixed (both male and female) lecturers tend to assign more readings by female authors compared to modules with male lecturers only. Modules with non-white lecturers or mixed (both white and non-white) lecturers tend to assign more readings by non-white authors compared to modules with white lecturers only. We also perform analysis by the nature of modules (compulsory or optional) and have similar findings. The majority of authors are based in Europe for compulsory modules and in North America for optional modules. Optional modules with only non-white lecturers tend to assign more readings by non-white authors compared to optional modules with white lecturers only.

The reading lists check suggests there is a lack of diversity of authorship in terms of gender, ethnicity and geographical location in the examined BSc economics curriculum. To address this issue, we start with a first-year compulsory module to diversify the reading list to have a more diverse set of authors, topics, examples and applications. We summarize the biographies and contributions of top Black, Asian and minority ethnic (BAME) and/or female economists and identify a list of videos by diverse economists on their research and integrate the relevant videos to the module. Moreover, we re-design the module research project, as part of summative assessment, to have more diverse perspectives reflected.

Finally, we conclude our study by reflecting on the supply of female and minority economists and offering some thoughts on how to address the diversity issue in both short and long terms. For example, enhance the exposure of students to the work by BAME and/or female economists (“Role Model” effect); foster students’ growth mindset that their ability is not fixed but rather can improve and grow; support underrepresented students throughout economics pipelines from their undergraduate and postgraduate study to academic career; mentor and support BAME and/or female economists.

## Using an online interactive textbook for content delivery in large quantitative units

Ralf Becker (University of Manchester)

The Covid pandemic forced lecturers to rethink the way content is delivered to students. Live online lectures and pre-recorded video recordings became standard tools of synchronous and asynchronous

content delivery respectively. Reading materials (textbooks or lecture provided notes) also often supplement the content delivery, but are not usually used as the sole source of new content.

We present summary findings regarding the use of an online, interactive textbook-type resource. This resource combined text-based content delivery with pre-recorded online videos and questions (with instantaneous feedback to students) to check students' understanding. This resource was produced for large Mathematics and Statistics units for Economists unit with 900+ students. It was delivered in the pandemic affected academic years 2020/21 and 2021/22 but continues to be used since.

While the online textbook was used to deliver the content asynchronously, there were twice-weekly Review and Q&A sessions in which students could bring up any questions and problems and in which the lecturer would review some of the key concepts introduced in the online lessons.

We present findings on the usage pattern of the resource as well as student feedback. The student feedback presented, leads to the conclusion that, even as on-campus lecture delivery is becoming available again, a future blend of learning activities can include substantial asynchronous content delivery. The online textbook allows us to observe patterns of study we cannot normally observe. The amount of time spend on the learning resource and its timing as well as the engagement with the feedback questions allows us to identify some of the study patterns of successful and less successful students.

### The use of social networks to implement a research-led curriculum

Sofia Izquierdo Sanchez (University of Manchester) & William Taylor (Lancaster University)

Improving the integration between research and teaching in higher education is an interesting yet complex issue that has been studied in several research papers. However, in practise, although different modules within the economics departments claim to be research-led teaching this is implemented in a passive learning style and is sometimes inappropriate for the level. The most research-intensive universities seem to be the most criticized by students when implementing research-led teaching, suggesting there is not an optimal nexus between teaching and research in these institutions. We propose the introduction of social networks, specifically Instagram, to introduce research-led teaching in the curriculum. Although social networks have been used before to increase engagement, mostly they were used as form of announcements or material sharing platform, and their effect on engagement was inconclusive. Thus, we propose the use of social networks as a way of (1) introducing research-led teaching activities; (2) increasing engagement and (3) relating teaching to students' real lives.

This approach is innovative and it may seen as unorthodox at first, but we argue that adjusting to the students' interests will increase their engagement and their understanding of the subjects, specifically the subject of economics. In a cross-university and cross-module project, we related our and students life's events to economic concepts, linking them also with relevant literature and using them as case studies (<https://www.instagram.com/dailylifeecon/>). We look at the incidence that the interaction through this platform has in engagement and performance in the classroom.

Tuesday 13:45 – 14:45 James Watt Hall

### Group Work positivity

Cloda Jenkins (Imperial College London)

Being able to work effectively with others is a key requirement for life after university. We know, for example from Economics Network research on Employability Skills, that economics students can develop a wide range of skills and knowledge if they engage with group work through their degree.

However, group work can, as Tim Harford (2018) emphasises, get Messy. Many lecturers avoid using assessed group work and when they do students often do not engage effectively leading to dissatisfaction and a lost learning opportunity. I am creating guidance for economics lecturers and students on how to make group work a more effective and positive experience, focusing in particular on assessed group work. The guidance reflects lessons from the literature on group work and findings from two surveys that will be carried out in May and June 2023- one of economics students and their experiences of group work and one of economics lecturers and their experiences of group work. At the DEE workshop I will discuss the draft guidance with the aim of getting refined ideas from a discussion with colleagues who have and have not tried to use group work assessments. The participants will be broken into small think-pair-share groups focused on particular themes emerging in my research and asked to share their group thoughts in Miro to enable them to be captured for further refinement of the guidance.

Tuesday 13:45 – 14:45 Craig Room

### Panel: Innovations in teaching CORE Econ

Luz Marina Arias (Center for Research and Teaching in Economics), Lavinia Moldovan (Mount Royal University), Aselia Urmanbetova (Georgia Institute of Technology) & Matteo De Tina (University of Bath)

The panel focuses on the innovations in teaching methods of CORE Economy.

These innovations aim to make the teaching of CORE more engaging, digitally enabled and critical. The panel members will discuss these innovative tools:

- Photo competition: encouraging students to connect the concepts they learn in CORE Econ to the real-world examples around them by capturing a photo.
- Mobile app: creating a customised digital learning environment for CORE Econ. The platform provides new tools for student self-study and for asynchronous communication between teachers and students and for students among themselves. The app content provides learning activities that incentivize reading and engagement with the material.
- Simulations: Using computer simulations for teaching macroeconomy units, hence building a closer connection between theory and data. By making the study of macroeconomics similar to that of a laboratory experiment in the natural sciences, this tool aims to enhance transferrable and employability skills of economics students, by stimulating their curiosity and imagination through a “learning by doing” approach.
- Critical pedagogy: the ways in which instructors can combine the CORE Econ with various critical pedagogy tools such as Critical Teaching Behaviours and Significant Learning Objectives and Backwards Course Design.

Tuesday 13:45 – 14:45 Gibson Room

### “An exam by any other name...”: Understanding the role of A-levels in students' assessment expectations

Annika Johnson, Steven Proud & David Thornthwaite (University of Bristol)

In 2022, A-level Economics joined the top 10 most popular A-levels in England, despite no UK undergraduate programme listing A-level Economics as an entry requirement. Many students then progress to Economics at undergraduate level, bringing with them their enthusiasm for the discipline but also a very specific approach, framed by the A-level. This not only affects their implementation of theory during their early years of study, but also their assessment expectations. It often manifests through questions such as ‘How many evaluation points do I need?’, ‘how many paragraphs do I need for a 24-mark question?’ or ‘how much is an urgent remark?’. By better understanding the A-level assessment environment experienced by many high school students, it becomes easier to understand why our students are asking these questions and to scaffold a path towards the higher order skills required of undergraduate students.

In this workshop, through a series of group activities, we share our insight from teaching and examining A-levels to help participants explore what an A-level is and how students are trained in A-level assessments, so that we can better aid students' transition into higher education.