Parallel Sessions: Session Two 11:35-12:35

Abstracts

Contents

Wicked Problem Set: Building Circular Bridges: Lesson From a Data Fellowship Programme

Room: Pendulum Suite
Time: 11.35-12.35
Session Organisers:

- Jackie Carter (Professor in Social Statistics, Cathie Marsh Institute for Social Research) jackie.carter@manchester.ac.uk
- Izzy (Isobel) Crowne (Casual Q-step Data Fellow Intern, Cathie Marsh Institute for Social Research) isobel.crowne@student.manchester.ac.uk
- Zac Perera (Casual Q-step Data Fellow Intern, Cathie Marsh Institute for Social Research) zac.perera@student.manchester.ac.uk
- Klara Valentova

Abstract:
In this session we will present a model and skills framework that has been used successfully in The Faculty of Humanities to help students develop their research, analytical and professional skills through experiential learning. The Data Fellowship programme which started in 2013 has now placed 330 undergraduate students into research-driven, data-led work placements to help take the learning (in this case in data skills and quantitative research) from the classroom to the workplace, and then build on this for future careers and further study. Across all of the data fellows cohorts, 70% (at least) each year have been women, and 25% from under-represented groups. The programme is inclusive by design and has been acknowledged by industry through Prof Carter's external accolades.

In this session Prof Jackie Carter will introduce the programme and share her findings from this, including her research outputs. She will present the research, analytical and professional skills frameworks she has developed and tested which students use to reflect on their learning during their time as a data fellow (at the beginning, middle and end of their placement). Two former data fellows will speak from their own experience about how reflecting on their skills helped them in their final

year of study. A former data fellow - now in employment in the data industry - will also discuss how the programme assisted them in navigating into their career.

The roundtable discussion with participants will provoke discussion around the following themes:

- How we build circular bridges to deal with structural issues of inequality within and outside of the Academy
- Funding for sustainability, and how to scale up a successful experiential learning programme
- Embedding employability frameworks of the type discussed into the curriculum.

Wicked Problem Set: Next steps to getting the blend right

Room: Graphene 1
Time: 11.35-12.35
Session Organisers:

- Caroline Bowsher (Professor of Biology, Division of Molecular & Cellular Function) caroline.bowsher@manchester.ac.uk
- Steve Pettifer (Professor of Computer Science, University Academic Lead for Digital Learning, Department of Computer Science) steve.pettifer@manchester.ac.uk
- Alison Fisher (Lecturer, Division of Psychology & Mental Health) alison.fisher@manchester.ac.uk

Abstract:
With the approval of 'First Steps To Flexible' by Senate in May 2021, The University committed itself to a 'conscious move to adopt Blended Learning as our default model of delivery at Programme level'. Blended Learning in this context is a thoughtful and responsive combination of on-campus, synchronous online and asynchronous online learning experiences designed to maximise and promote active learning and engagement. While 'First Steps' devolves the responsibility of creating 'a balanced portfolio of synchronous, asynchronous, on-campus and on-line activities across a programme' to course unit leaders 'in consultation with those responsible (e.g. programme directors or equivalent)', it does not prescribe the mechanism by which this 'conscious move' will be achieved.

Recognising the need for such a mechanism, a paper 'Getting the Blend Right' was co-created by colleagues from across the University to provide guidance to course unit leaders and programme directors. The paper outlines a framework to underpin the University's approach to the design and delivery of Blended Learning, and highlights overarching principles with the explicit intention that these can subsequently be built upon, refined and operationalised by Faculties and other areas involved in the delivery of teaching and learning.

We will briefly outline the 'Getting the Blend Right' framework before working together to identify actions that can support its operationalisation. How can broader adoption be incorporated within the Teaching, Learning and Student Experience structures of the University? How can we capture and share effective practice where blended learning has already been implemented or embedded?

Wicked Problem Set: Is it still internationalisation? Discussions and implications on Chinese students pursuing postgraduate degrees in education in the University of Manchester

Room: Conference Room 2
Time: 11.35-12.35
Session Organiser:

- Bowen Zhang (Education, Faculty of Humanities) bowen.zhang-6@manchester.ac.uk

Abstract:
Recruiting international students has been an important quantifying effort for higher educational institutions to internationalise, which has been the focus of major initiatives to promote internationalisation. China has emerged as the key source nation for sending students to Western countries in terms of country of origin. For instance, figures from 2022 in the UK reveal that 143,820 (23.8%) of the 605,130 international students in the UK are Chinese (Erudera, 2022). In some programmes, such a percentage even tends to be exaggerated. For example, in some sessions of the Master's degree programme, it can be shown that more than 90% of students come from China. I have noticed that in some extreme situations where the only person in the class who is not Chinese is the instructor, some Chinese students begin to question the value of their study-abroad experience.

While existing literature tends to evolve from researching on Chinese students' general acculturation and adaptation to more critically examination such as the discursive construction, there is still a lack of insight when the majority of students in a classroom are international students from the same country and with shared cultural backgrounds. In this discussion session, I aim to firstly explore the potential reasons for students' perception of a compromised internationalisation, and secondly invite three discussants - a Chinese Master's student studying education programme, a lecturer from China and a lecturer from UK - joining me to discuss their experiences in such a classroom setting, and jointly reflect what internationalisation means in a practical sense.

Lightening Talks: Sustainable Change

Room: Conference Room 3
Session Schedule:

- **11.35-11.45: Sustainable ways to build connections between academia and industry through live streaming -**Lindsay Pressdee (Senior Lecturer in Fashion Bus Marketing, Department of Materials) Lindsay.pressdee@manchester.ac.uk

Lessons learned through the pandemic on how live streaming can be used as a sustainable teaching tool has allowed the introduction of an industry panel in UG third-year project units. The purpose of this was to engage and inspire students as they enter their degree's final semester through a flexible digital live-streaming model on campus.

The ability to stream into the session develops a sustainable alternative to travelling to campus and allowed guests to join from across the UK and Europe. The panel consisted of 6 industry professionals who streamed into the session from across the UK and Europe into a lecture theatre of around 150 third-year students. The choice of panel was made up of professionals from a wide range of areas

within the fashion industry. This gave choice and variety to the panel, not limited by physical location; for the students, it gave them a glimpse into the industry as they transition from academia into the workplace.

The online panel removed the need for guest speakers to visit the university, taking a whole day out of their calendar, and instead required just one hour of their time at the end of a working day. With the added benefit of not being limited by location, we could invite a greater variety of guests. The session was also recorded so students could revisit it later; they could connect with the guests through LinkedIn and develop their own professional network.

- **11.45-11.55: The Future of Higher Education: Unleashing the Power of ChatGPT -** Kevin Harding (Lecturer in Fashion Technology, Department of Materials) kevin.harding@manchester.ac.uk

The emergence of powerful language models, such as OpenAI's ChatGPT, has created exciting new possibilities for education. AI technology has the potential to transform the future of teaching and learning in higher education. By addressing sustainability, equity and access, ChatGPT can reshape the educational landscape.

ChatGPT could be a sustainable cost-effective, scalable solution able to be transformative by creating innovative, eco-friendly learning experiences. Leveraging AI can create opportunities for equity and access, helping to democratise education by providing personalised learning experiences and extending educational opportunities to underprivileged communities and global learners, thereby fostering a more diverse and inclusive environment.

Staff and students can collaborate in developing new teaching methods and educational tools powered by ChatGPT. Fostering a culture of co-creation and innovation allows us to stay at the forefront of educational transformation and empower the next generation of learners. ChatGPT's potential to enhance higher education can lead to a more educated and informed global society, capable of addressing pressing issues such as climate change, inequality, and global health.

As a ChatGPT superfan, I am excited to see the incredible potential that this AI technology holds for transforming higher education. This lightning talk will explore how we are in a unique position to lead this change, fostering a more sustainable, equitable, and accessible future for all. This talk hopes to inspire students and staff to create a new era of teaching and learning that will have a lasting impact.

- **11.55-12.05: The use of Synchronous Q&A Software to Promote Student-Staff Interactions -** Alexander Squires (Lecturer in Economics, School of Social Sciences, Faculty of Humanities) alexander.squires@manchester.ac.uk

We present a mixed methods comparative assessment of three online discussion forums widely used in higher education. We combine different data types (quantitative, qualitative) and sources (usage data, survey responses) to assess Piazza, Padlet, and Blackboard discussion boards. We highlight and discuss the differences between, and relative merits of, the tools and report the preferences of students on a large introductory Economics unit for them. We summarise lessons learnt from using the tools and make recommendations to engender greater student engagement with online discussion spaces.

- **12.05-12.15: Academic Advising as Teaching: Relational pedagogy -** Emma Sanders (Teaching & Learning Officer, Teaching and Learning Support Division) emma.c.sanders@manchester.ac.uk

This lightning talk aims to bring the potentially daunting task of Academic Advising down to size by re-framing it as a personalised, student-centred part of an academic's regular teaching and learning activity, drawing on ideas from relational pedagogy (K. Gravett) and Catherine Bovill's work on the symbiotic links between relational pedagogy and co-creation.

- **12.15-12.25: Mindfulness in the Higher Education Experience: Students, Educators and Pedagogy -**Margaret Cunningham (Lecturer, Law) margaret.cunningham-2@manchester.ac.uk

I propose to discuss the tool of Mindfulness in Higher Education. The talk will describe mindfulness, its scientific basis, and its many benefits for students (in terms of well-being, and its potential for sharpening cognitive and critical skills). Techniques for integrating mindfulness in to the student experience (using the presenter's discipline, Law, as an example), will be highlighted. The talk will then turn to the teacher. Benefits of mindfulness for the higher education teacher, in his/her personal capacity, and professional role(s), will be expounded. The presenter will then discuss, from her own experience of both law teaching, and mindfulness practice and teaching, what advantages can be gained from infusing tenets and principles of mindfulness in to not only the substance, but also the style, of teaching in higher education. The talk will draw on the presenter's experience, and scholarship which she has undertaken in this area.

- **12.25-12.35: General Q&A and Discussion**

Paper Presentations: Authentic Assessment

Room: Conference Room 4
Session Schedule:

- **11.35-11.55: The University Living Lab: Authentic assessment that affects change for sustainable development whilst enhancing the student experience -** Jennifer O'Brien & Students (Senior Lecturer in Human Geography, School of Environment, Education and Development) Jennifer.obrien@manchester.ac.uk

Students are an undervalued force for change through their assessment (O'Brien, 2019). Recognised as good practice by Advance HE, the University Living Lab (www.universitylivinglab.org) links research framed around the Sustainable Development Goals between organisations and students. University Living Lab projects are accessible to all disciplines, at all levels. The projects can be used as assessment within taught units, or as a bank of inspiration for dissertations and coursework. Once marked, our platform returns quality work to the organisation who set it; we return evidence of impact to the student. Over 1000 students have worked with a huge range of partner organisations, including international consultants, governments, health bodies, charities and local businesses. Impacts range from urban resilience research that was presented to the Rockefeller Foundation, New York, to consultancy on council policy. Two students have been employed by organisations they researched for, many more attribute employability to this experience. Drawing upon existing assessment time, this authentic flexible assessment is accessible to all, offering light touch industry experience as part of students' core learning. The scale of opportunity is staggering; if half our 43,000 students dedicated

a quarter of their assessment we could generate over 7.5 million hours of research time annually to tackle the world's 'wicked problems. Drawing on student voice, this presentation critically shares the scalable approach (O'Brien, et al., 2021).

O'Brien, J., Evans, J., Karvonen, A., Millard, L., Wendler, J., Blakey, J. and Jones, R. (2021). Brokering applied research between students and organisations to affect change for sustainable development. COP26 Universities Network Case Study.
O'Brien, J., (2019) Empowering students to create a sustainable world University of Manchester Magazine (online) available at: https://www.manchester.ac.uk/discover/magazine/opinion/empowering-students/ accessed 12/01/2022

- **11.55-12.15: Gradescope for programming and maths assignments -** Ekaterina Kazak (Lecturer, Economics)

In this talk, we will be demonstrating an innovative AI tool that has recently been introduced to automatically mark coding assignments in Gradescope. Our aim is to provide an overview of the process required to set up an Autograder, along with a detailed walkthrough of the supported types of coding assignments. Throughout the presentation, we will be using R as an example language.

In addition, we will delve into the use of Gradescope as a powerful assessment tool for marking mathematics assignments. By leveraging Gradescope's capabilities, markers can save time while providing students with personalized and timely feedback. Our discussion will highlight the benefits of utilizing this tool and how it can enhance the teaching and learning experience.

- **12.15-12.35: Students in the Stacks: Using Collection-based Learning in Assessment -** Aya Van Renterghem (Special Collections T&L Coordinator, Curatorial Services)

The collections-based teaching that is taking place across the University of Manchester Special Collections has come to cover a wide range of formats over the years. We offer introductory classes to Special Collections, basic handling training for various fragile and rare items, display sessions to illustrate or illuminate academic teaching, and in-depth workshops on certain collection items or on topics such as the History of the Book or palaeography. Although many of these sessions are part of the curriculum or have over time become embedded in academic modules, object-based learning is still mostly used to encourage students to use primary sources and to give them the skills and knowledge to do so. The aim has rarely, if ever, been to involve this type of learning in students' assessment.

Recently, however, there has been much more interest (from the academic side) and encouragement (from the Special Collections side) to involve object-based learning and/or the practical skills and knowledge gained from this type of learning in various forms of alternative assessment, ranging from blog posts to archival projects as the basis for essays. In this paper I will to discuss examples of alternative assessments with collections that we have been developing or have supported, and the benefits of such an approach from both an academic and library point of view.

Paper Presentations: Co-creation of learning

Room: Conference Room 6
Session Schedule:

- **11.35-11.55: Using co-creation to teach mathematics in an economics degree programme: some lessons and insights -** Panos Sousounis (Senior Lecturer in Economics, Faculty of Humanities) panagiotis.sousounis@manchester.ac.uk

There is a wide range of scholarly activity labelled "students as partners" and "co-creation in learning and teaching" in the literature, and which often transcends the boundaries of student engagement and participation in class activities. We follow a definition similar to that put forward by Bovill et al. (2016) that students are active participants in the learning process, constructing both understanding and resources together with academic staff. We draw lessons and insights from a co-creation initiative in a mathematics class delivered simultaneously in the first and second year of a three-year economics degree programme with multiple subject pathways. The obvious challenge in teaching mathematics (and statistics) to students following different pathways, and at different levels, is how to balance the level of technical difficulty and detail that each subject requires, and students can tolerate. We don't claim to have conclusively solved this riddle, but we do believe that co-creation holds the key. Together with a group of home and international students, we use the Mobius platform, a digital study and assessment aid, to develop study material that help understand, contextualise, and assimilate technically demanding material. Some of the key insights from this exercise are that (a) instructors cannot safely assume that T&L material produced (recently or in the past) will be equally effective in perpetuity, (b) co-creation does not imply rendering control over the material taught to students, and (c) co-creating T&L resources needs to be an embedded practice rather than a response to evaluations/feedback.

- **Using an Academic Conference for Undergraduate Assessment -** Kate Sapin (Lecturer, Manchester Institute of Education) kate.sapin@manchester.ac.uk. Choen Yin Chen, Chang Gao, Karen Healey (Postgraduate, Department of Education) karen.healey@manchester.ac.uk, Sara Jackson (Lecturer, Education), sara.jackson@manchester.ac.uk, Lingyi Zhou (Undergraduate, School of Environment, Education and Development) lingyi.zhou@student.manchester.ac.uk

The MIE Undergraduate Education Research Conference held in March 2023 aimed to provide an 'authentic' opportunity for undergraduate students to develop and enhance their current research projects through participation in a real academic conference where they could present their work in progress. The conference participants were BSc Education students, where year 2 students presented a poster outlining a research proposal and year 3 students presented their dissertation as a work in progress. The conference involved a range of formative and summative assessment methods, including flexible, self and peer assessment as well as formative feedback. We will identify and evaluate the 'hits and misses' of our methods, tools and practices in order to share and continue to build on our experiences and learning for future iterations. Reflections on the guidelines, submissions and feedback produced whilst planning and facilitating the conference, and the results of the conference feedback survey, will be explored from the perspectives of the undergraduate and postgraduate students and academic staff who organised and participated in the conference.

The practices, processes and pedagogy to be highlighted will include the role of presentations and interactive formative assessment in learning as well as their potential for identifying students' level of engagement with their topics. We are also interested in how a conference can be a tool for social responsibility and widening research impact and will discuss ways to build on our previous experiences of organising undergraduate conferences to engage with local community organisations and schools.

- **Using Summer Internships with an Educational Theme to Improve Student Experience -** Martin Simmons (Senior Lecturer in Engineering, Department of Mechanical, Aerospace & Civil Engineering) martin.simmons@manchester.ac.uk

For many years summer internships have been offered to undergraduate students within the School of Engineering. Traditionally, these have given students the opportunity to broaden their knowledge of engineering through conducting a short research project. However, for teaching-focused academics who are not involved in subject-related research, it can be more appropriate and rewarding to offer internships with an educational theme. These internships provide an excellent opportunity to improve T&L/student experience in partnership with students.

Towards the end of the previous academic year, two summer internship projects with educational themes were offered by an academic within the School of Engineering. 'Internship A' focused on developing teaching and learning resources to support engineering degree programmes, whilst 'Internship B' was related to improving Peer Assisted Support. Both internships were sufficiently broad to give interns the flexibility to take the project in their preferred directions.

All the internships delivered successful outcomes but with varying degrees of impact. Internship A was undertaken by two students who chose to produce 'active learning' resources for Structures and Control Engineering course units. However, at the present time these resources have not yet been deployed. Internship B was undertaken by a single student who focused on improving peer support for Foundation Studies students within FSE. The main output from this project was an action plan for the current academic year. The plan has provided a stimulus for change and it currently looks likely that a peer mentoring pilot scheme for FSE Foundation Studies students will be implemented in the next academic year.

Overall, the summer internships with an educational theme have been rewarding for the interns and supervisor, but their impact could be increased and evaluated further. To address this, more specific constraints will be applied to future summer internships of this nature so that the resources produced can be more easily deployed. Further work could also involve the evaluation of the FSE Foundation Studies Peer Mentoring pilot scheme and subsequent dissemination of the findings to other Faculties.