

MANCHESTER  
1824

The University of Manchester

UCIL

University College for  
Interdisciplinary Learning

# INTERDISCIPLINARY LEARNING AND TEACHING CONFERENCE

THURSDAY, 21 MARCH 2024

THE UNIVERSITY OF MANCHESTER

FINAL PROGRAMME

[www.manchester.ac.uk/interdisciplinaryconference24](http://www.manchester.ac.uk/interdisciplinaryconference24)



# Programme

Details of the day, including rooms and timings, can be found under the [conference programme](#).



**TOP TIP:** You can click on the title of the talk you are interested in and you will be taken to the abstract and biographies of the speakers.

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## Traditional, lightning talks and workshops

There are three types of sessions throughout the day:



- Traditional talks (15 minutes each, traditional paper talks)



- Lightning talks (5 minutes each, overview of paper)



- Workshops (interactive, problem-focused sessions)

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## Audience

You will see each talk has the intended audience above the title of the talk in blue, these include:

- **New / Some / Expert / All** - Whether the talk assumes very little (new) or a lot (Expert) of knowledge of interdisciplinary learning.
- **UG/PG/UG-PG** - This indicates the study level this talk will be most relevant for.
- **Assessment/Experiences/Impact/Wildcard** - States which [theme of the conference](#) the talk relates to.

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## Navigate this programme

- [Keynote speaker and opening plenary talk](#)
- [Welcome, opening plenary and session 1 \(9:20 - 11:15\)](#)
- [Session 2 \(11:30 - 12:30\)](#)
- [Session 3 \(13:30 - 14:30\)](#)
- [Workshop session \(14:45-15:45\)](#)
- [Closing plenary \(15:45 - 16:15\)](#)
- [Overview and biographies for workshops](#)
- [Abstracts and biographies for traditional talks](#)
- [Abstracts and biographies for lightning talks](#)



# Keynote speaker



Professor Rafe Hallett  
Higher Education Consultant

Keynote title:  
Designing Interdisciplinary  
'Challenge-based' Education

## About:

Professor Rafe Hallett currently works as a Higher Education Consultant, advising universities on themes such as curriculum design, education leadership development, portfolio diversification and embedded employability. He has held education leadership roles at the Universities of Leeds and Keele, and co-designed the University of Leeds' Liberal Arts programme. He has acted as external examiner for interdisciplinary programmes at Royal Holloway, Warwick, Sheffield and UCIL Manchester and is proud to have hosted this conference twice!

## Opening Plenary: Designing Interdisciplinary 'Challenge-based' Education

Professor Rafe Hallett will reflect on the growth of issue-based and 'challenge'-led interdisciplinary education across the HE sector, noting how universities structure these opportunities variously into programmes, pathways and clusters of innovative modules.





After reflecting on these structures, Rafe will explore the mixture of staff expertise needed to deliver these kinds of educational models, looking particularly at the need for an academic-professional spectrum of talent, and the role of 'hybrid' or 'third space' university staff in supporting their success. The session will include a participatory section which will invite delegates to map the stakeholders that are most crucial in supporting their interdisciplinary education projects.

# Programme

Traditional paper / 15 minute talks



5 minute lightning talks

9:00 - Arrival at the Alan Turing Building with tea, coffee, pastries and fruit provided.				
Time	Alan Turing G107	Alan Turing G108	Alan Turing G207	Alan Turing G209
9:20 - 10:15	<b>Welcome and Introduction</b>  <b>Opening Plenary</b> Designing Interdisciplinary 'Challenge-based' Education Rafe Hallett			
10:15 - 11:15	 <p><i>New-PG-Assessment</i> Interdisciplinary Perspectives by Design <b>Bip Choudhury, Dianne Burns</b> <b>University of Manchester</b></p> <p><i>New - UG - Wildcard</i> Creating Inclusive Future Leaders through Interdisciplinary Learning <b>Rachel Cowen</b> <b>University of Manchester</b></p> <p><i>All - UG/PG-Experiences</i> Creating a template for collaborative infrastructures in interdisciplinary courses <b>Katrine Ellemose Lindvig</b> <b>University of Copenhagen and CoNavigator</b></p>	 <p><i>Expert-UG/PG-Experiences</i> Sharing a Design Methodology for Interdisciplinary Courses <b>Maria Charalambous, Stephen Barber</b> <b>Regent's University London</b></p> <p><i>Some-PG-Experiences</i> Tuning Tensions: Interdisciplinary learning in an asynchronous distance learning environment <b>Adam Matthews, Tim Jackson</b> <b>University of Birmingham</b></p> <p><i>Some-PG-Experiences</i> Pedagogy, Space and After Disciplines: A thematic learning model for higher education <b>Liam Greenacre</b> <b>University of Leeds</b></p>	 <p><i>Some-UG-Experiences</i> Embedding of interdisciplinarity into the curriculum through breadth modules – an evaluation of staff and student experiences <b>Richter Uwe Matthias, Mark Warnes</b> <b>Anglia Ruskin University</b></p> <p><i>Some-UG-Experiences</i> Creating Edinburgh: Interdisciplinary learning and teaching in the expanded field <b>David Overend, David Jay, M. Winter</b> <b>University of Edinburgh</b></p> <p><i>Some-UG-Experiences</i> Students' teamwork behaviour in multidisciplinary student teams: issues and ways forward <b>Roosmarijn van Woerden</b></p>	 <p><i>Some-UG/PG-Experiences</i> Beyond the boundaries: Interdisciplinary sustainability education for all <b>Lynda Dunlop, Sally Quinn</b> <b>University of York</b></p> <p><i>Expert-UG/PG-Experiences</i> Promoting Interdisciplinary Learning: Experiences from the School for Transdisciplinary Studies <b>Eleni Spiroudis</b> <b>University of Zurich</b></p> <p><i>All-UG/PG-Experiences</i> Design for Interdisciplinary Learning <b>Mia Thyrrre Sørensen, Maria Hvid Stenalt</b> <b>Aalborg University</b></p>
11:15 - 11:30 - Morning break in the Alan Turing Foyer with tea, coffee and snacks				

Time	Alan Turing G107	Alan Turing G108	Alan Turing G207	Alan Turing G209
11:30 - 12:30	 <p><i>Some-UG/PG-Impact</i> Empirical evidence for learning outcomes of interdisciplinary higher education: a systematic review <b>Jessica Oudenampsen</b> <b>Utrecht University</b></p> <p><i>Some-PG-Impact</i> Interdisciplinary programme development and delivery to tackle climate change <b>Jenny Davidson,</b> <b>Michelle Black</b> <b>Newcastle University</b></p> <p><i>Some-UG/PG-Impact</i> Expertise as developed through an interdisciplinary curriculum <b>Rianne van Lambalgen</b> <b>Utrecht University</b></p>	 <p><i>Some-UG-Experiences</i> Engaging disciplinary students in interdisciplinary electives <b>Jael Draijer</b> <b>Utrecht University</b></p> <p><i>Some-UG-Experiences</i> Creating authentic interdisciplinary experiences for transformative learning <b>Elaine Brown</b> <b>Anglia Ruskin University</b></p> <p><i>Some-UG-Experiences</i> Visualising structural barriers to Interdisciplinary Learning <b>Stephen Marshall</b> <b>University of Strathclyde</b></p>	 <p><i>Some-UG-Experiences</i> In (partial) defence of the "Sage on the Stage:" why I teach "traditional" political theory in a "radical" problem-based module <b>Emma Ahmed-Rengers</b> <b>The London Interdisciplinary School</b></p> <p><i>Some-UG-Wildcard</i> Lessons learnt from incorporating generative AI in interdisciplinary learning and assessment <b>Iliada Eleftheriou, Ajmal Mubarik, Gabriel Strain</b> <b>University of Manchester</b></p> <p><i>Some-UG/PG-Experiences</i> Traveling Concepts in the Classroom: Experiences in Interdisciplinary education <b>Brianne McGonigle Leyh</b> <b>Utrecht University</b></p>	 <p><i>New-UG-Impact</i> Formula student as vehicle for learning <b>Theodor Heath</b> <b>University of Manchester</b></p> <p><i>Some - PG- Assessment</i> Students' responses to their peers' contributions on discussion boards: promoting meaningful interdisciplinary experiences through discussion questions <b>Moises Vieira</b> <b>University of Manchester</b></p> <p><i>Some - UG - Experiences</i> 'I don't know my discipline so how can I do interdisciplinarity?': The case of the exotic in interdisciplinary plenaries. <b>Oliver Sterland, Catherine Davidson</b> <b>Regent's University</b></p> <p><i>All - UG- Experiences</i> Enhancing students' employability skills while interdisciplinary learning is promoted <b>Maria Limniou, Kat Purdy</b> <b>University of Liverpool</b></p> <p><i>All - UG- Experiences</i> Smart notes for connective thinking' – Liberal Arts and Sciences UU <b>Lou Boshart, Rianne van Lambalgen Elangovan</b> <b>Utrecht University</b></p>
12:30 - 13:30 - Lunch in the Alan Turing Foyer with sharing platters, coffees and tea.				

Time	Alan Turing G107	Alan Turing G108	Alan Turing G207	Alan Turing G209
13:30 - 14:30	 <p><i>New - UG/PG - Assessment</i> Interdisciplinary assessment to shape understanding AND make a difference: The University Living Lab <b>Jennifer O'Brien</b> <b>University of Manchester</b></p> <p><i>Some - UG/PG-Assessment</i> Interdisciplinary assessment as a site for humanising HE <b>Heather Meyer</b> <b>University of Warwick</b></p> <p><i>Some-UG-Assessment</i> Process over product: The use of a workbook to support interdisciplinary learning <b>Betsy Porritt, Abigail Bellamy-Carter, Simon Scott</b> <b>University of Birmingham</b></p>	 <p><i>Expert - PG - Assessment</i> Codifying measures of integration for learning <b>Mattia Gallotti</b> <b>The London Interdisciplinary School</b></p> <p><i>Some - PG - Experiences</i> AcrossRCA: A leap of faith <b>Chris Mitchell, Tim Sowden</b> <b>Royal College of Art</b></p> <p><i>Some - PG - Experiences</i> Running interdisciplinary engineering MSc dissertation projects: challenges and how to address them <b>Hosam Aleem</b> <b>University of Manchester</b></p>	 <p><i>Some - UG - Experiences</i> Training the Integration Experts of the Future: Integrative Teaching and Learning in Inter- and Transdisciplinary Higher Education <b>Sabine Hoffmann, Swiss Federal Institute of Aquatic Science and Technology</b></p> <p><i>Some - UG/PG - Experiences</i> Travelling in the Classroom: Podcasting as an Active-Learning Tool for Interdisciplinarity <b>Tessa Diphooorn</b> <b>Utrecht University</b></p> <p><i>Some - UG - Experiences</i> Open-innovation for commons-based entrepreneurship <b>Suneel Kunamaneni</b> <b>University of Manchester</b></p>	 <p><i>New-UG/PG-Assessment</i> Interdisciplinary assessment – integrating reflection in finance <b>Patricia Perlman-Dee</b> <b>University of Manchester</b></p> <p><i>New-UG/PG-Assessment</i> Designing an Interdisciplinary Rubric: Challenges and Opportunities <b>Jillian Terry</b> <b>London School of Economics</b></p> <p><i>Some - UG - Experiences</i> The International Conference of Undergraduate Research (ICUR): Undergraduate conferences as interdisciplinary learning experiences <b>Emma Barker, Fiona Farnsworth</b> <b>University of Warwick</b></p> <p><i>Some - UG/PG- Experiences</i> The write way forward? Creative writing and teaching environmental politics <b>Jeremy Moulton</b> <b>University of York</b></p> <p><i>Some - UG - Wildcard</i> Student co-creation in an interdisciplinary context: Lessons from a learner/ observer <b>Saniya Kholsa, Elaine Clarke</b> <b>University of Manchester</b></p> <p><i>Some - Cont Education- Wildcard</i> Creating interdisciplinarity <b>Linda Robinson</b> <b>The Open University</b></p>
14:30-14:45 - Afternoon break in the Alan Turing Foyer with snacks, tea and coffee				

# Workshops

Once the afternoon break concludes at 14:45, there will be four interactive problem-based workshops, which are scheduled to finish at 15:45.

## **Alan Turing G107:**

*Some - PG - Assessment*

"My photo expedition in Manchester shows the presence of climate change in...": shifting the assessment paradigm through interdisciplinary coursework"

**Vladimir Janković, Maria Kopsacheili**  
**University of Manchester**



## **Alan Turing G108:**

*New - UG/PG - Experiences*

Objects Between Disciplines: Using the Museum of Medicine and Health collection in teaching and learning

**Harriet Palfreyman, Stephanie Seville,**  
**Carsten Timmermann**  
**University of Manchester**



## **Alan Turing G207**

*All - UG/PG - Wildcard*

Workshop for Changemakers: Fostering Inner Development Goals for Sustainable Education

**Freeke Jansen and Belle Jansen**  
**Utrecht University**



## **Alan Turing G209**

*All - UG/PG - Assessment*

Reflecting across disciplinary boundaries: challenges and opportunities

**Elaine Clark, Saniya Khosla**  
**University of Manchester**



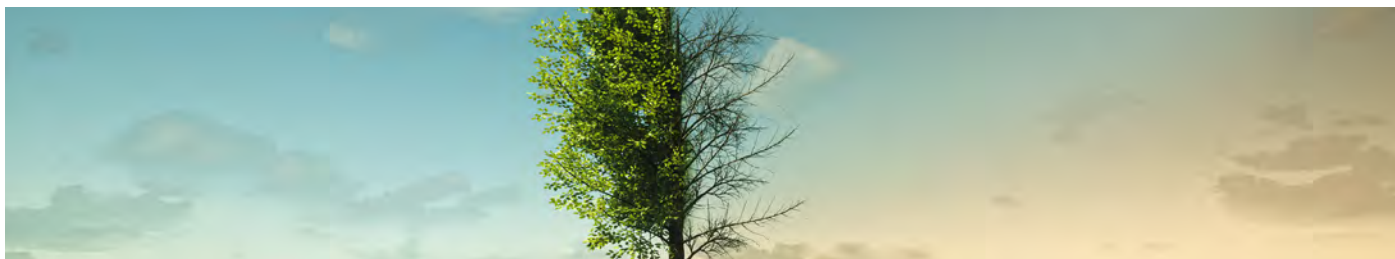
**Closing Plenary:**  
**15:45 - 16:15 in Alan Turing, G107**

This session will serve as a forum for conference delegates to address collectively some of the challenges inherent in interdisciplinary teaching and learning. Delegates will be invited to share solutions to challenges submitted in advance, drawing on their own experience and inspiration from the conference sessions they have attended. The session aims to showcase innovative approaches and elicit tangible strategies for overcoming obstacles in interdisciplinary education.

[Let us know what challenges](#) you have faced in delivering and supporting interdisciplinary learning. During this closing plenary, we'll be asking our delegates to share solutions to your challenges.







## **Workshop:**

**"My photo expedition in Manchester shows the presence of climate change in...": shifting the assessment paradigm through interdisciplinary coursework"**

**Vladimir Janković and Maria Kopsacheili**  
**University of Manchester**

This workshop explores the sensory experience of assessment in an interdisciplinary setting and its impact. It draws on the Expedition Photo Essay students submit as part of their Summative Assessment in the UCIL unit "Climate Change and Society". It is found that through critical observation students succeed in: 1) revealing the public visibility of climate change in urban contexts; 2) expanding it beyond the realm of environmental change into social practice. We will discuss further this 'added value' of assessment and lessons to be learned for the Educator. The delegates become 'students' and set off to an exploratory exercise to reflect on Assessment for interdisciplinary learning with legacy.

### **Vladimir Janković**

Vlad is a historian of atmospheric sciences who writes on the cultural history of meteorology, medical environmentalism, and contemporary urban climatology in relation to urban design. His research focuses on scientific, cultural, and social engagement with weather and climate since the 1700s. He is a Reader in History of Science and Atmospheric Humanities at the Centre for the History of Science, Technology and Medicine (CHSTM), University of Manchester. In 2005, he was featured on *Storms of War*, the Discovery Channel's five-episode documentary on warfare and the weather. He is the author of *Reading the Skies* (Chicago, 2000), *Confronting the Climate* (New York, 2010), *Intimate Universality* (with Fleming and Cohen, 2005), *Weather Local Knowledge and Everyday Life* (with Barbosa, 2009), and *Klima* (with Fleming, Chicago, 2011).

### **Maria Kopsacheili**

Maria completed her PhD in Archaeology in 2013 (University of Oxford) and started her academic career as a Research Assistant and Teaching Associate at Oxford, Warwick, and Birkbeck. In 2016-2020 she was a Lecturer (teaching-focused) in Ancient History and Archaeology at the University of Manchester. She has extensive experience in archaeological fieldwork, collections-based teaching, and curriculum design. Since 2021, she has been a member of the UCIL team, where she works closely with unit convenors to develop interdisciplinary online and blended units. She's currently leading the development of the new [Philosophy in Action](#) unit and a short version of [Why China Matters](#) for alumni. Maria is an Advance HEA Fellow and Honorary Fellow of the Institute of Teaching and Learning (UoM).



## **Workshop:**

### **Objects Between Disciplines: Using the Museum of Medicine and Health collection in teaching and learning**

**Harriet Palfreyman, Stephanie Seville and Carsten Timmermann**  
**University of Manchester**

The Museum of Medicine and Health (MMH) contains one of the most extensive collections of medical instruments and equipment in England. Spanning more than 300 years, the collection represents a significant educational and cultural asset for The University of Manchester.

As part of the Faculty of Biology, Medicine and Health the museum actively supports social responsibility priorities by placing science in a social and historical context. The museum already supports various teaching and learning activities across faculties through loaning objects for use in a variety of disciplines.

Objects are valuable in interdisciplinary teaching where we have students from various backgrounds with different disciplinary knowledges and approaches to their learning. Objects give them something tangible to hang these differences on and facilitate communication across disciplines. They have the potential to help students develop a deeper appreciation of the importance of material culture in all realms of modern life. The historical collection of the MMH speaks to issues that underpin many of UCIL's current units such as the sustainability development goals, particularly Good Health and Wellbeing, issues of equality, diversity and inclusion (in health-care and beyond), and the development of communication skills through storytelling about objects.

This workshop will first introduce some of the teaching the MMH already facilitates. Following this, participants will have the chance to handle a selection of objects from the MMH and work to think about how such objects can be used to facilitate interdisciplinary learning in a variety of new areas.

**Harriet Palfreyman** lectures in Science Communication at the Centre for the History of Science, Technology and Medicine (CHSTM, in FBMH). She is a historian of medicine by background and regularly brings approaches from the humanities into her teaching of science communication. Her research focuses on the visual and material cultures of medicine - particularly around disease, sexual health, and surgery - from the nineteenth century to the present. Having been appointed as Academic Lead for the FBMH's Museum of Medicine and Health in 2023 she is now working on expanding the collection's use in teaching and developing work on object-centred teaching and learning.

**Stephanie Seville** is a museum professional with experience of managing and curating collections spanning Fine Art, Decorative Art, Social History and Medical History. She has been in post as Heritage Officer within the Museum of Medicine and Health, part of the Faculty of Biology, Medicine and Health for 10 years. Stephanie works to support academic staff in public engagement and teaching and learning with university heritage and also works at the John Rylands Research Institute and Library.

**Carsten Timmermann** is Professor of History of Science, Technology and Medicine and Director of CHSTM. He has published on issues in the history of medicine in the nineteenth and twentieth century, especially cancer research and cancer therapy, and on the rise of the risk factor concept in making sense of illness. In his teaching in recent years he has been concentrating on the history of biology and the history of approaches to mental illness. He has a longstanding interest in the material culture of science and medicine and until 2023 was Academic Lead for the Museum of Medicine and Health.



## **Workshop:**

### **Workshop for Changemakers: Fostering Inner Development Goals for Sustainable Education**

**Freeke Jansen and Belle Jansen**  
**Utrecht University**

The Inner Development Goals (IDGs) can encourage change-making in education and prepare students for the transitions our society is facing. In this interactive workshop, we will delve deep into the IDG framework and the [Transition Makers Toolbox](#). With interdisciplinary tools such as Navigating Uncertainty, Exchanging Perspectives, and Fostering Resilience, the Toolbox empowers educators to teach transformative skills for sustainable development. After a short presentation, we will engage in a playful activity to explore the IDGs and you will have the time to connect this information to your educational context. Join us if you want to get inspired, shape educational practices, and equip your students with the skills and attitudes required to make a positive impact on our world.

**Freeke Jansen** works for the Dutch university alliance EWUU and contributes to the Transition Makers Toolbox. With a background in sociology and sustainability, she is passionate about innovative education and driven to prepare students for the challenges of the future by introducing them to Challenge Based Learning, transdisciplinary collaboration and the Inner Development Goals.

**Belle Jansen** is the project coordinator and communication officer for the Transition Makers Toolbox. Alongside her organisational role, she works as a confidential adviser at the University of Amsterdam and brings balance and mindfulness as a certified yoga teacher, combining holistic well-being with her mission of fostering positive change.





### **Workshop:**

### **Reflecting across disciplinary boundaries: challenges and opportunities**

**Elaine Clark and Saniya Khosla**

**University of Manchester**

Reflection and learning are deeply intertwined (Veine et al., 2019; Harvey, Coulson, & McMaugh, 2016; Schön, 1983), with reflection vital to the integration of theoretical/practical skills and the recognition of limiting assumptions.

UCIL's 'Communicating with Confidence' unit seeks to support students in confronting, and addressing, issues relating to communication and confidence and relies on reflection to support this. However, a lack of familiarity with the process can pose a particular challenge within interdisciplinary units, where student's experience varies depending upon degree (Dymond and O'Connor, 2010).

In this workshop, we share how we have sought to scaffold co-reflection and will use our shared experience, and practice, to explore how interdisciplinary learning can enhance confidence in the reflective process and deepen co-creation of learning. Participants will take part in a range of activities, to stimulate reflection on the challenges, and opportunities, of utilising difference to create a more integrative, collaborative, interdisciplinary learning and assessment environment for students.

### **Elaine Clarke:**

I originally trained, and worked, as a professional Actress; appearing in Musical Theatre and Stage performances across the UK and abroad and featuring in a number of West End Productions. After ten years in this wonderful profession, I decided a change was needed and trained as a psychologist. Upon completing my training, I worked within education and then the NHS and whilst doing so studied part time for a PhD, graduating from Alliance Manchester Business School (AMBS) in 2008.

I joined the University immediately after gaining my PhD and am fortunate to work on a wide range of courses and programmes. These have included work within the NHS on the Nye Bevan and Elizabeth Garrett Anderson Leadership programmes, work with Clinical Scientists on a doctoral level programme, Programme Director for the BSc Management degree programme, and acting as course director on a number of undergraduate courses. Within my University College, Communicating with Confidence, I am able to draw upon my earlier training, and skill, in both theatre and psychology to support students in developing greater confidence and resultant increase in self-efficacy. I recently had the opportunity to work with Advance HE to identify ways to enhance well-being through the curriculum and this has become a consuming passion. I am currently working as an Institute of Teaching and Learning Fellow to identify methods to enhance the current University College input through a blended unit on communication and confidence. Interdisciplinary learning and assessment environment for students.

### **Saniya Kholsa**

I am an international student from India studying psychology at the University of Manchester. I am currently on placement with the University College for Interdisciplinary Learning (UCIL) and my role is Project and Marketing Assistant. One of the projects I was involved in was the student co creation of the upcoming blended unit of [Communicating with Confidence](#) led by Dr. Elaine Clark. This unit draws from various disciplines including Biology, Psychology, Theatre and many more. My role involved helping re-develop the workshops of this unit and providing constant feedback on each module so that the students are fully supported throughout the unit.



### Interdisciplinary Perspectives By Design

**Bip Choudhury and Dianne Burns**

**University of Manchester**

The PGCert MHE has health care professionals from the fields of medicine, nursing, dentistry, physiotherapy and scientists learning and undertaking assignments together. The assessment strategy seeks to develop key skills for these practitioners which reflect real life contexts and encourages them to think between disciplines.

Participants undertake three modules: The Reflective Educator, Art and Science of Teaching and Pass or Fail: Who Decides? There are between 1-2 formative submission points per module to aid participants in their approach to the assessment question. We have an innovative peer review process whereby participants are asked to give constructive feedback on a peer's submission, which directly encourages interdisciplinary dialogue.

Summative assessments require participants to produce:

- 1) an academic blog of their journey as a health care educator,
- 2) a set of teaching notes and a teaching video
- 3) an academic style essay which requires an analysis of assessment approaches used in their own context.

Participants are encouraged to debate and discuss each of these assignments during tutorials and on asynchronous discussion boards, helping everyone to learn of the different challenges each discipline faces. For example, discussions on stakeholders involved in education generates rich discussion and helps participants realise the complexities involved in generating a curriculum for different healthcare disciplines.

**Bip Choudhury** (MBChB, PhD) is a Reader in Anatomy teaching anatomy and histology to undergraduate medics, dentists and scientists. She is lead for assessments for the PGCert in Medical and Health Professions Education as well as the deputy programme director. Her PhD was in Medical Education and she is a senior fellow of Advance HE. She has published several children's books in anatomy with Dorling Kindersley.

**Dianne Burns** RGN, MSc (Clinical Leadership), BSc Hons Advanced Nursing Studies (Nurse Practitioner), RNT, PGCE, SFHEA, ILM Coaching and Mentoring. Reg NMC is a Senior Lecturer within the Faculty of Biology Medicine and Health at the University of Manchester with a specific interest in healthcare and educational leadership, management and effecting change. She has a robust track record of innovation in staff development activities across the University. She is Academic Lead for the FBMH AHE Fellowship Award Scheme and Pedagogy Programmes and the Director of the PG Cert in Medical and Health Education.

## **Creating Inclusive Future Leaders through Interdisciplinary Learning**

**Rachel Cowen and Catherine Atkinson**

**University of Manchester**

Interdisciplinary learning offers a unique, rich learning experience through which students and educators can share, appreciate and embrace diverse cultural and personal perspectives and experiences, develop empathy, understanding and an inclusive mind set and grow as confident and empowered inclusive future leaders critically needed in our global and interconnected world. In this presentation we will share how we are using interdisciplinary learning at the University of Manchester to accelerate equalities progress. Promoting collective accountability for EDI, through education and empowerment of our community aligned with our organisational strategy.

We will share experiences of successfully developing and delivering a fully online, interdisciplinary, credit bearing undergraduate unit called 'Equality, Diversity and Inclusion: Your role in shaping a fairer world. Students from all disciplines and in all years of study explore EDI through a range of contexts including the workplace, research and innovation, education and health and social care. Beginning with an historical overview of social reform, comparing global legal frameworks around EDI, providing students with the tools and frameworks to begin looking at their own role in driving EDI as inclusive future leaders.

We will outline the benefits of co-creating unit content with diversity and inclusion student ambassadors and equalities experts across wide ranging disciplines and career sectors including funders and public and private sector partners. We will share innovative approaches to assessment which provide optionality for students from assessing inclusivity of their discipline curriculum content to creating blog posts inspired by archival materials that depict past values and attitudes and set EDI in the context of societal norms.

Student feedback evidences the impact of our interactive and engaging approach, the power of intersectional case studies and thought-provoking discussion boards and the value of the unit to our student community. The unit is now offered as a taster to all prospective new students emphasising our commitment to EDI from the start of study. During the presentation we will encourage the audience to reflect and share ideas for how we can all harness interdisciplinary learning to embed EDI in the student curricula and experience.

**Rachel Cowen** is Professor of Inclusive Researcher and Academic Development, University Academic Lead for Equality, Diversity and Inclusion (Gender and Sexual Orientation). She has 30 years' experience as a cancer researcher, organisational developer and equalities champion. She has led institutional strategy, policy and practice developments and worked with a network of inspirational colleagues to support academic excellence within a culture that values diversity and prioritises equity of opportunity, reward and recognition. She is a mentor, coach and champion for diverse and inclusive leadership development, supporting the career advancement of colleagues across the university and sector.

**Catherine Atkinson** is a Lecturer in the Manchester Institute of Education. Her research focuses on challenging gender and sexualities inequalities in education, and on exploring the effects or otherwise of educational equalities initiatives. Catherine is currently involved in research exploring wellbeing inequalities amongst LGBT young people in Greater Manchester. As Associate Director of Equality, Diversity and Inclusion for SEED in 2022-23, Catherine played a leading role in preparing SEED's successful application for the Athena Swan Silver award; a framework used to evaluate the university's commitment to gender equality. Catherine is now the SEED EDI Lead for Gender and Sexualities Equality.



## **Creating a template for collaborative infrastructures in interdisciplinary courses**

**Katrine Ellemose Lindvig**

**University of Copenhagen and CoNavigator**

With teaching and learning practices deeply affected by local and situated circumstances, developing a one-size-fits-all model for interdisciplinary courses is fraught with challenges. Nevertheless, in this paper, we present a potential method and template for building collaborative infrastructures, which we argue could be applied to most interdisciplinary activities.

In the presentation, we examine the importance of building collaborative infrastructure in interdisciplinary activities, using the master's programme developed by a 5-year NSF-funded Interdisciplinary Consortium for Applied Research in Ecology and Evolution (ICARE) as a case study. Here, collaborative infrastructure was created by using CoNavigator, a physical tool for interdisciplinary collaboration. At the management level, CoNavigator was used as a planning tool to ensure structure, transparency and coherence; at the practice level, the tool fostered agency, alignment of expectations and collaboration among participants.

A main finding from the case study is the need for a common thread and a clear visible structure. Offering collaborative initiatives such as the CoNavigator-sessions only as singular, isolated events - rather than essential ongoing processes - diminished their effectiveness. Results show that the students who were offered a clear plan for the entire process and involved in the collaborative infrastructure from day one, had a much more positive and productive outcome from the programme, compared to the students who were only part of single CoNavigator-sessions and without any introduction or follow-up.

The findings from the ICARE-programme emphasize the significance of developing robust, ongoing collaborative infrastructures and bring us closer to creating a general template for interdisciplinary activities.

**Katrine Ellemose Lindvig** is an Assistant Professor of Higher Education Research at University of Copenhagen, Denmark. Her main field of research is the translation of policy in higher education, and how concepts such as interdisciplinarity, sustainability and digitalisation translate and travel from research into the curriculum of higher education courses and programs. Together with David Earle and Line Hillersdal, she has founded CoNavigator, a physical tool for interdisciplinary collaboration.

## **Sharing a Design Methodology for Interdisciplinary Courses**

**Maria Charalambous and Stephen Barber**

**Regent's University London**

We showcase a methodology created to work across disciplines and to support innovative and valuable interdisciplinary course design. Grounded in scholarship, the methodology was trialled during a comprehensive redesign project of the of the entire undergraduate portfolio at a university. The project's objective was to instil a liberal arts ethos in the curriculum, focused on nurturing subject expertise while emphasising the development of a breadth of human skills with a hands-on entrepreneurial approach to address real-world challenges.

We outline the principles and practical steps behind the design method and share what was learned when it was deployed successfully to redesign 20 degrees, including those in Business, Psychology, Art History, Acting, Media... While there is some flexibility built into the approach, key characteristics can be identified as drivers of the entire design process. Integration is maintained by a perceived 'golden thread' of the scaffolded student journey within any curriculum model. Moreover, the ethos, the courses' epistemological purposes, proprietary pedagogic approach and design parameters are able to be reviewed and upheld throughout, so that they align to the end - product. All these require teams with enhanced collaborative capacity and a diverse range of expertise reflecting interdisciplinary working.

**Maria Charalambous** serves as the Associate Provost, Learning & Teaching at Regent's University London taking charge of its Learning, Teaching and Assessment strategy and practice. Her responsibilities extend to overseeing the professional pedagogic framework ensuring continuous professional development for academics. She leads the Educational Development team, supporting academic innovation and effective learning and teaching practice. Maria recently oversaw the development and introduction of university-wide learning outcomes, as well as the re-design and coordination of the university's undergraduate portfolio on the new curricular architecture, through which she introduced and applied a co-creative curriculum design process.

**Stephen Barber** is Professor of Global Affairs and Head, Department of Innovation & Management in University of East London. He is responsible for providing leadership for the department's staff, portfolio of academic programmes, quality assurance, scholarship and contributing to university and school strategic plans. He has published widely on topics including the fourth industrial revolution, Brexit, governance and leadership. Before coming to UEL in 2023, Stephen was Assistant Dean in the Business School and then a Director (with university wide responsibility for curriculum design) at Regent's University London. He also served as Director of MBA at the University of Bedfordshire, where he led a large, diverse and dispersed portfolio of programmes. He was Associate Professor in Public Policy at London South Bank University for eight years, where he led the Master's in Public Administration and PGR.

## **Tuning Tensions: Interdisciplinary Learning in an Asynchronous Distance Learning Environment**

**Adam Matthews and Tim Jackson**

**University of Birmingham**

Design is inherently interdisciplinary with a network of actors and technologies within multifaceted spaces with ill-defined boundaries and diverse goals, priorities, and experiences. Tensions emerge between actors immersed in academic disciplines and professional practice. Individuals possess deep disciplinary groundings which designers lead towards original and novel synthesis. In design education, disciplinary grounding and authentic assessments can create experiences that support interdisciplinary learning and assessment with both academic and professional practice outcomes being achieved.

Here, we present a case study on how we as designers and academics from different disciplines 'tuned the tension' through unbundling a 60 credit, 600-hour postgraduate online programme into 5 disciplinary modules taken in any order by fluid student cohorts and completed with a capstone case-study. The programme was designed and delivered collaboratively by discipline leads to achieve a guiding and supportive structure for students while encouraging creative responses to a design challenge with various tensions. The design thinking process of empathy, definition, ideation, prototyping and testing in a case study scenario served as a structuring device for the capstone module.

The interdisciplinary team designed and delivered this capstone module in collaboration – mirroring the task we ask of students. This design encountered tensions which we ask students to embrace to develop their own interdisciplinary mindset and design practice in their own context. Tensions faced for learners, teachers and assessors included social and temporal separation, between depth and breadth, between grounding and integration, between academic literature and practice and fairness and consistency in evaluating designs integrating disciplinary domains.

**Adam Matthews** is a Senior Research Fellow in education systems and policy. Adam's work looks at universities as part of tertiary education systems and the role that they play as key sites of knowledge production and dissemination in wider society. This includes how technologies and media have and are shaping, knowledge production and access.

**Tim Jackson** is a Reader in Electrical Engineering with research interests in Engineering Education. His teaching includes the design and tutoring of distance learning courses, his leadership responsibilities are distance and digital learning, postgraduate programmes and widening participation. Tim's earlier research activities on the electronic and magnetic properties of novel materials were largely cross-disciplinary. Tim has also worked as a leader and technical consultant for science-based theatre in education, with a particular focus on exploration of issues through audience involvement.

## **Pedagogy, Space and Time After Disciplines: A Thematic Learning Model for Higher Education**

**Liam Greenacre**

**University of Leeds**

Higher Education pedagogy should be post-disciplinary (Pernecky, 2019) in the way that it should not be restrained by traditional boundaries. Instead, I argue, it should be guided by thematic inquiry. Broad and widely important topics could serve as the path for doing this. By using the thematic examples of 'space' and 'time', I aim to demonstrate a possible model for post-disciplinary learning. I will show how learning can be guided by 'stepping into the unknown' and embracing being out one's comfort zone. Thematic learning can be seen as a journey, where one starts with curiosity and desire (Munar and Hall, 2019) and ends up developing faith and confidence in their ability to understand areas of knowledge they were previously unfamiliar. This allows them to reflect on the meta-level (the theme) and integrate a variety of knowledge to come with theories and hypotheses. In this presentation, I shall discuss space and time and how one can embark on a journey to explore these topics. Taking a ride through a variety of topics and guided by thematic reading and understanding, I shall discuss how I came to the conclusions that space and time is best conceived as a network. Step-by-step, I shall show how interdisciplinarity can be a personal and affective process in which one can develop themselves, both in terms of knowledge, but also self and wider awareness. Thematic learning is not only a step beyond disciplines, but also a step into reflection, personal and academically.

**Liam Greenacre** is a transdisciplinary researcher and PhD student in Sociology and Social Policy at the University of Leeds. His work tries to use transdisciplinary theory and methodology to create more positive futures. He has presented at numerous international conferences, including the WFSF XXV World Conference and the Eighteenth International Conference on Interdisciplinary Social Sciences.

## **Embedding of interdisciplinarity into the curriculum through breadth modules – an evaluation of staff and student experiences**

**Uwe Mattias Richter and Mark Warnes**

**Anglia Ruskin University**

During 2021-22, ARU introduced breadth modules called Ruskin modules (RM) in the second year of all undergraduate courses to introduce three themes into the curriculum: Interdisciplinarity, Sustainability, and Employability. All RMs shared the same learning objectives on Interdisciplinarity namely to “Critically reflect on the limitations of a single discipline to solve wider societal concerns by applying knowledge created through the discovery and exploitation of connections across disciplines”.

This paper reports the research undertaken in 2023 to identify how interdisciplinarity was embedded into the curriculum of 20 RMs (staff focus groups) and how students experienced interdisciplinarity (student questionnaire). The student questionnaire had 129 responses and explored questions including how students defined interdisciplinarity, how interdisciplinarity related to working with people from different disciplines, how different perspectives were formed through working across disciplines, how interdisciplinarity was assessed, and how experiencing and learning about interdisciplinarity has changed their perspective on studying and employment. The staff focus groups involved 12 RM staff and explored definitions of interdisciplinarity applied in RMs and how interdisciplinarity was embedded and assessed. A particular focus was on group and teamwork as activities to develop interdisciplinarity.

The paper concludes with recommendations and examples of effective practice benchmarked against Lyall et al. (2015, p. 23) ‘Synthesis of interdisciplinary teaching strategies and pedagogical techniques’.

Reference: Lyall, C., Meagher, L., Bandola, J. and Kettle, A. (2015) Interdisciplinary provision in higher education: current and future challenges. *Advance HE*.

**Uwe Richter** is the Associate Professor for Digital Pedagogic Innovation at the Centre for Innovation in Higher Education at Anglia Ruskin University and is involved in developing communities of practice in Pedagogic Research aligned with university teaching and research strategies. Uwe’s research interests include Pedagogic Research and scholarly work, digital pedagogic innovation, technology-enhanced, online and distance learning, and work-based learning. Uwe has taught a wide range of undergraduate and postgraduate courses in Modern Foreign Languages and Culture, urban geography, technology-enhanced learning and Education face-to-face and online. Uwe is also a Senior Fellow of the Higher Education Academy and a University Teaching Fellow. Uwe has published approximately 30 academic outputs and co-edited the book *Innovations in Active Learning in Higher Education* in 2020.

**Mark Warnes** is the Senior Research Fellow for the Centre for Innovation in Higher Education at Anglia Ruskin University and is involved in developing communities of practice in Pedagogic Research to support university teaching and research strategies. Mark’s research interests include Pedagogic Research, Teaching Excellence, Reward and Recognition, and Assessment and Feedback. Mark has taught a wide range of undergraduate and postgraduate courses in Research Methods, Politics, Sociology, and Social Work, and delivered online courses in social media. Mark is also a Fellow of the Higher Education Academy and an Associate Teaching Fellow. Mark has published approximately 60 academic outputs, plus 55 internal reports. In 2020 he co-edited the book, *Innovations in Active Learning in Higher Education*.

## **Creating Edinburgh: Interdisciplinary learning and teaching in the expanded field**

**David Overend, David Jay and M. Winter**

**University of Edinburgh**

This paper follows an experimental interdisciplinary undergraduate course into the busy, unpredictable space of the contemporary city. It locates practice-based research of interdisciplinary higher education in a dynamic learning environment, which is comprised of unpredictable connections between disciplinary perspectives. The aim is to enter into a formative relationship with the architectures, geographies, ecologies and performances of the city. *Creating Edinburgh: The Interdisciplinary City* is an undergraduate elective offered by Edinburgh Futures Institute at the University of Edinburgh. It provides students with opportunities to explore the city of Edinburgh in small groups comprised of students from a wide range of degree programmes. Groups are invited to engage with a selection of themed fieldwork topics throughout the 11 weeks of the course, visiting specific sites and responding to a series of tasks and questions. These include topics such as Sustainability, Decolonisation and Wildness. This paper sets out to travel with students as they navigate their way through the city during their weekly field trips. It offers an insight into interdisciplinary learning and teaching in the expanded field of the contemporary city. Conceiving of urban space as an assemblage of digital and non-digital objects, events and activities, members of the research team venture into the unknown, alongside the students, equipped with audio recorders, cameras and notebooks. The documents of these research journeys are then re-assembled and re-performed for this presentation, evoking a multiplicity of meaning and experience through a multi-authored text.



**David Overend** is a Lecturer in Interdisciplinary Studies at Moray House School of Education and Sport at the University of Edinburgh. His research interests include interdisciplinary education, creative fieldwork and contemporary theatre and performance. As a director, David has worked for the National Theatre of Great Britain and several other theatres and has toured internationally with award-winning productions. His books include *Performance in the Field: Interdisciplinary practice-as-research* (Palgrave Macmillan 2023), *Making Routes: Journeys in performance 2010-2020*, co-authored with Laura Bissell (Triarchy Press 2021), and an edited collection, *Rob Drummond: Plays with participation* (Bloomsbury Methuen Drama, 2021). David is currently working with Edinburgh Futures Institute as Deputy Director of the new MA(Hons) Interdisciplinary Futures.

**David Jay** is a Lecturer in the Faculty of Arts, Humanities, Education and Social Sciences at Anglia Ruskin University in Cambridge, UK. His background is in teaching language, linguistics and academic skills; most recently he has focused on higher education pedagogies, working with inclusive and creative approaches to learning and teaching. David has co-ordinated various interdisciplinary projects in which students of Humanities and Social Sciences communicated their ideas in artistic form, including sculpture, photography and design. He is currently undertaking doctoral research, drawing on Barad's agential realism as a theoretical framework to explore how human and nonhuman participants relate to each other across academic disciplines.

**M. Winter** is a research fellow at the Moray House School of Education and Sport, as well as a research affiliate of the Edinburgh Futures Institute, both at the University of Edinburgh.

## **Students' teamwork behaviour in multidisciplinary student teams: issues and ways forward**

**Roosmarijn van Woerden**

**Utrecht University**

The great challenges of the modern age such as climate change or global inequality are complex problems that transcend disciplinary boundaries. Multidisciplinary teamwork is needed to bring together disciplinary insights and to create a more comprehensive understanding of these complex problems. Higher education should prepare students for working in multidisciplinary teams that conduct interdisciplinary research, but relatively little is known about how students interact in multidisciplinary student teams (MSTs). This study analysed teamwork behaviour of students in MSTs, using observational data. Our findings show that tendencies vary across different teams, but that general trends can be identified across teams. Students struggle to have structured meetings in which they work together on one task, have in-depth integrative discussions and reach quality decisions. They shy away from addressing suboptimal team processes and frustrations, but spend much time on task division, planning, uncertainty reduction and distractions during meetings. The interdisciplinary research process is not optimal because of these teamwork issues in MSTs. Possible ways forward are formulated, as students need more time in class to do teamwork and they need more guidance in all aspects of the process, such as their role as disciplinary and interdisciplinary expert, going through diverging and converging integration processes, critical decision-making, engaging with feedback in a meaningful way, addressing frustration and tension, and reflecting on the interdisciplinary team product and processes.

**Roosmarijn van Woerden** has a research background in Philosophy, Political Science and Religious Studies and she has been teaching in interdisciplinary undergraduate programmes for the last 11 years. Her current research is focused on teamwork in multidisciplinary student teams, and she is mainly interested in student' needs for teamwork education, students' actual teamwork behaviors, student' conceptualizations of teamwork, and the effectiveness of reflection teaching interventions to improve team work processes in multidisciplinary student teams that are conducting interdisciplinary research. The overall aim of the research is to improve teamwork education in multi- and interdisciplinary higher education programmes.

## **Beyond the boundaries: interdisciplinary sustainability education for all**

**Lynda Dunlop and Sally Quinn**

**University of York**

Interdisciplinary learning can provide students with a wealth of skills and capabilities beyond within-discipline learning. The ability to value and work across disciplinary boundaries is essential for responding to contemporary sustainability challenges and is therefore a key employability skill. One challenge is how to bring students from diverse disciplines together meaningfully and create opportunities to apply interdisciplinary learning beyond the institution. The University of York has recently developed a suite of modules referred to as 'York Interdisciplinary Modules (YIMs)'. The aim of these modules (Sustainability Clinic, Climate Crisis Action Lab, Future of Food and Sustainability and Policy) is to ensure students can access meaningful opportunities to tackle authentic sustainability challenges, offering opportunities to work with external partners where appropriate. The interdisciplinarity of YIMs is reflected in the delivery (experts from various disciplines), and the way in which students work together in interdisciplinary groups, bringing the expertise of their disciplinary background to work on solutions. YIMs are open to all students across the University. Each YIM follows a clear set of design principles which broadly encourage asynchronous delivery of content, and a combination of supervised and independent group work. In our presentation, we will discuss the design and implementation of these YIMs, including how different teams across the institution collaborated to ensure a positive student experience. We will discuss the creation of new systems to support interdisciplinary teaching, barriers we have experienced, and ways these have been tackled. We welcome feedback on remaining barriers and challenges, and recommendations for future developments.

**Lynda Dunlop** is Director of Education for Environmental Sustainability at York, Programme Leader for the MSc in Environmental Sustainability Education & Communication and teaches and researches environmental education.

**Sally Quinn** is the newly appointed Director of Interdisciplinary Teaching at the University of York, and a Senior Lecturer in the Department of Psychology (BSc Programme Lead). As Director of IDT, she is responsible for championing the development of IDT across the institution by supporting colleagues with the development of IDT modules and programmes and leading on changes to and the development of systems and policies where appropriate.

## **Promoting Interdisciplinary Learning: Experiences from the School for Transdisciplinary Studies**

**Eleni Spiroudis**

**School for Transdisciplinary Studies, University of Zurich**

The School for Transdisciplinary Studies at the University of Zurich (UZH), operational since 2021, fosters inter- and transdisciplinary learning, urging students to address real-world challenges beyond disciplinary boundaries. Our courses enable students to develop holistic problem-solving abilities by integrating knowledge, methods, and perspectives from diverse disciplines. This proposal discusses specific courses as examples, highlighting some challenges and strategies based on our experience.

### **1. Courses Illustrating Inter- and Transdisciplinary Practices**

#### **a) "Mentoring for the Next Generation"**

Students support socially disadvantaged children in coping with challenges, coached by practice partners. Theoretical insights from diverse disciplines enhance their understanding of civic engagement's societal impact.

#### **b) "UZH Innovathon: The Digitalization of Mobility"**

Students and faculty collaborate across faculties to address challenges related to the digitalization of mobility, developing innovative solutions through a dynamic "design sprint" format.

### **2. Challenges of Inter- and Transdisciplinarity in Higher Education**

#### **a) Institutional barriers: Traditional structures and curricula may hinder collaboration across faculties.**

#### **b) Differing perspectives and communication: Bridging terminological, methodological, and epistemological gaps requires additional effort.**

### **3. Strategies to Meet the Challenges**

#### **a) Institutional support: Establish dedicated transdisciplinary units to facilitate coordination and collaboration among departments.**

#### **b) Fostering collaboration: Encourage cross-disciplinary collaborations among faculty and provide platforms for sharing experiences.**

#### 4. Lessons Learned and Conclusion

Implementing interdisciplinarity at a comprehensive university is challenging but vital. The School for Transdisciplinary Studies aims to build bridges between disciplines. We are committed to equipping students with skills to address real-world challenges effectively and look forward to sharing our experiences and strategies at the Conference in March 2024.

**Eleni Spiroudis** completed her Master's degree in German Linguistics and Literature at the University of Zurich. She has worked as a project assistant, team leader, and teacher in various universities in Switzerland, including the University of St. Gallen and the University of Applied Sciences St. Gallen, where she focused on curriculum development and the promotion of interdisciplinary skills among students. As Deputy Managing Director at the School for Transdisciplinary Studies (University of Zurich), that provides inter- and transdisciplinary courses for students of all faculties, she supports faculty in developing new courses and ensures the administrative framework and processes of the School.

#### **Design for Interdisciplinary Learning**

**Mia Thyrré Sørensen and Maria Hvid Stenalt**

**Aalborg University**

Higher education institutions have increasingly focused on providing their students with interdisciplinary learning opportunities in recent years. It is widely agreed that developing skills to think and collaborate across disciplinary boundaries is essential for students. However, there is still much debate and limited empirical evidence on how best to develop pedagogy and design learning activities that focus on interdisciplinary competencies.

The lack of clarity and empirical evidence makes it challenging for teachers to design effective interdisciplinary learning experiences without prior experience. To address this issue, we conducted a systematic review of empirical studies published from 2018 to 2023 that examined interdisciplinary learning activities across educational programs. We reviewed 80 studies and used Bigg's model for constructive alignment as an analytical framework. Our presentation will provide an overview of the intended learning goals, learning activities, and forms of assessment included in the studies. Additionally, we will present helpful advice and guidelines for designing effective interdisciplinary learning experiences.

**Mia Thyrré Sørensen** is a postdoctoral researcher in Aalborg University's Institute for Advanced Studies in PBL, DK. Her research currently focuses on interdisciplinarity in higher education teaching and learning.

**Maria Hvid Stenalt** is a postdoctoral researcher in Aalborg University's Institute for Advanced Studies in PBL, DK. Her research currently focuses on interdisciplinarity in higher education teaching and learning.

#### **Empirical evidence for learning outcomes of interdisciplinary higher education: a systematic review**

**Jessica Oudenampsen**

**Utrecht University**

Although there is converging support for the importance of interdisciplinarity in higher education, research in the higher education sector has thus far provided little empirical support that contributes to the understanding of interdisciplinary education and its defined outcomes. Without clear defined and operationalized learning outcomes, it is hard to measure students' learning outcomes and to articulate the value of interdisciplinary education. By systematically synthesizing previous empirical findings on the learning outcomes of interdisciplinary education, this review aimed to provide a solid basis to further develop and assess the impact of interdisciplinary education in higher education.

A meta-synthesis approach was used to synthesise data in two rounds, based on strict (n=38) and more lenient (n=60) operationalisations of interdisciplinarity. The results revealed a variety of interdisciplinary learning outcomes that were categorised into three themes:

1) academic and disciplinary engagement, 2) metacognitive skills, and 3) perspective taking skills. Process results revealed that empirical evidence in the research field is still in its infancy. The findings of this review can be considered a starting point for the further operationalization of interdisciplinary learning outcomes, so that robust evidence can be collected. Furthermore, constructive alignment between learning outcomes and assessment of interdisciplinary education can be achieved once learning outcomes of interdisciplinary education are clear. In addition, with robust evidence, the learning outcomes of interdisciplinary education can be compared with other forms of learning such as monodisciplinary learning, to further articulate the impact of interdisciplinarity on students' learning.

**Jessica Oudenampsen** is a postdoctoral researcher at the University of Utrecht (the Netherlands). In 2019 she obtained her master's degree in Medicine at the Radboud University. In 2020 she started a doctoral study in which she investigated the learning outcomes of interdisciplinary education and analysed the design and learning outcomes of an interdisciplinary minor into healthcare communication, management and organisation. After finishing her dissertation ('Unraveling interdisciplinary education).



## **Interdisciplinary Programme Development and Delivery to Tackle Climate Change**

**Jenny Davidson, Michelle Black**

**Newcastle University**

The global challenge of tackling climate change and creating a more sustainable world is frequently associated with inter-connectedness, integration and collaboration and there are countless examples of interdisciplinary approaches to developing solutions to tackle these real-world issues across a number of sectors. Recently the UN have called for a Nexus approach to developing solutions for a more sustainable future and cite Higher Education Institutions (HEI's) as having a key role in this approach as educators, researchers and anchor institutions. School X is Newcastle University's Multi, Inter and Transdisciplinary School bringing together academics from across the university to deliver interdisciplinary learning and teaching. In 2023 the school launched an interdisciplinary pilot module which is part of an MSc Leadership in Climate Change and Sustainability programme launching in Sept 2024. Our paper sets out the interdisciplinary approach to module and programme design and development and the intended impact of the approach both in terms of educational outcomes and in relation to a material impact on the climate change agenda.

The interdisciplinary development brought together colleagues from a range of academic disciplines and Professional Services (Academic Climate Change Fellows, Curriculum Development Advisors, Strategic Planning and Change, Library, Career Service ).

We explore the good the bad and the ugly of interdisciplinary working in programme design and development from the team's perspective. We also explore the unintended shift from inter to transdisciplinary working and how this is reflected in the emerging programme content. Finally, we explore how our own interdisciplinary practices are supporting the student to develop their own inter (and arguably Trans) disciplinary approach to tackle climate change beyond the programme.

**Jenny Davidson** is a Senior Lecturer in Leader Development and Organisation Futures. Jenny has extensive experience bringing together organisations and the university in a shared ambition of supporting leaders in changing contexts. She has been working and carrying out research in the field of sustainability for over 20 years and has held a series of senior leadership roles in Sustainability in both the public and private sectors.

**Michelle Black** has more than 20 years of experience in professionally supporting and developing research, teaching and learning practices in higher education. Michelle is a Senior Fellow HEA and a Master of Education, with a particular interest in learning design and curriculum development. Her role focuses on working in collaboration with colleagues to facilitate the design and development of quality educational practices, accessible and inclusive education. Along with focusing more recently on embedding SDGs in the curriculum and supporting students and colleagues to enhance SDG knowledge and skills development across the student journey.

### **Engaging disciplinary students in interdisciplinary electives**

**Jael Draijer**

**Utrecht University**

In recent decades, there has been a growing trend towards Interdisciplinary Education (IDE). European universities now offer IDE in a variety of forms, including electives or minors, allowing disciplinary students to step outside the boundaries of their own bachelor's programme. At Utrecht University, however, some interdisciplinary electives have difficulty attracting students, or a sufficiently heterogeneous group of students. Not much is known about why some students choose to enrol in interdisciplinary courses, and why others do not. Therefore, it is important to gain a better understanding of the diverse considerations of disciplinary students regarding interdisciplinary electives and minors. This will help to remove potential barriers and make interdisciplinary studies more accessible and appealing to a broader group of students. In the current study, we aim to answer the following question: What are considerations and barriers for disciplinary students when choosing interdisciplinary electives? To answer this question, we conducted interviews with 15 students from various disciplinary backgrounds. We asked them about their views on the elective space and their understanding of and perspectives on IDE. Additionally, we presented students with a description of an interdisciplinary course and asked them which aspects of IDE appealed to them and which did not. The preliminary results provide indications of how interdisciplinary courses can be better aligned with students' interests. These findings can be used to inform student communication and curriculum development, and ultimately to encourage student engagement and enthusiasm for interdisciplinary education.

**Jael Draijer** is a postdoctoral researcher at Utrecht University in the Netherlands. She recently completed her PhD in Educational Psychology at the same university, focusing on interest development in young adults. In her postdoctoral research, she is studying interdisciplinary education from a student perspective, with emphasis on the needs of students before, during and after interdisciplinary education and the alignment with their interests.

## **Creating authentic interdisciplinary experiences for transformative learning**

**Elaine Brown**

**Anglia Ruskin University**

Interdisciplinary learning activities can build skills and aptitudes articulated as useful for future employment and outwardly respond to complex problems faced by communities. Skills such as collaboration and creativity, and aptitudes such as humility and curiosity can result from seeking to integrate different disciplinary perspectives. Those different perspectives can also give rise to internal change.

A process to integrate different disciplinary perspectives might start by reflecting on, identifying, and articulating one's own discipline (Mansilla et al., 2009) before being able to discuss it with others. This interrogation of self, questioning what other perspectives might mean for the student's assumptions and view of the world, can result in profound, personal transformative learning (Mezirow, 2008). This personal transformation can be positive and liberating but is also troublesome.

This presentation describes focus groups with students which used the narrative story as a framework to identify moments of transformative learning and the triggers that led to these moments. This presentation proposes triggers for transformative learning and suggests ways that learning experiences could be explicitly designed (Brown & Acevedo, forthcoming) such that interdisciplinary activities are not just engaging meaningfully to respond to challenges, but also transformatively.

**Elaine Brown** is the Institutional Lead for Personal Development Tutoring and Anglia Ruskin University's interdisciplinary, breadth Ruskin Modules. Elaine's research investigates the affordances of interdisciplinary curricula for transformative learning in students and the experiences of staff who design interdisciplinary curricula. Elaine has edited a forthcoming book, authored several chapters and advised Higher Education institutions on the implementation of interdisciplinary curricula. Elaine was delighted to be Co-Chair of the 7th Interdisciplinary Learning and Teaching Conference.

## **Visualising structural barriers to Interdisciplinary Learning**

**Stephen Marshall**

**University of Strathclyde**

In this paper we explore the challenges faced by institutions and academic disciplines in engaging in interdisciplinary learning, emphasising the impact of curricular structures. In liberal education systems, students undergo broad "general education", allowing them to explore diverse subjects across humanities, social sciences, languages, maths, and physical sciences. Conversely, career-focused higher education often confines students to teaching from a single department, limiting exposure to interdisciplinary perspectives. This paper quantifies the inhibiting effect of this restrictive approach on interdisciplinary innovation, particularly in the context of sustainable development education. The comparison of curricular structures between US and UK institutions particularly in the context of interdisciplinary Vertically-Integrated Project (VIP) modules reveals disparities in facilitating interdisciplinary education.

Structural barriers, such as rigid administrative processes, registration constraints, and limited flexibility in the curriculum, pose challenges to the implementation of interdisciplinary programs. The paper draws on the work of Sonnenberg-Klein to measure interdisciplinarity in higher education, utilising metrics to showcase the number of courses students experience outside their home degree subject and the 'distance' of these courses from their home subject.

While recognising some successes in navigating barriers to interdisciplinary education, the paper suggests larger-scale solutions, including promoting flexibility in the curriculum, encouraging engagement with external stakeholders, and advocating for students to take courses from other departments. Network diagrams comparing US and UK degree structures illustrate the differences in the integration of interdisciplinary components. Ultimately, the paper aims to address and overcome structural barriers to interdisciplinarity, particularly in the context of sustainable development education.

J. Sonnenberg-Klein, E. J. Coyle, and K. Saigal, "How 'Multidisciplinary' Is It? Measuring the Multidisciplinarity of Classes and Student Teams," in 2023 ASEE Annual Conference & Exposition, Jun. 2023.

**Stephen Marshall** holds a first class honours degree in Electrical and Electronic Engineering from the University of Nottingham and a PhD in Image Processing from University of Strathclyde. His research activities focus on Hyperspectral Imaging. He has published over 200 conference and journal papers. He is a Fellow of the Institution of Engineering and Technology (IET). He has also been successful in obtaining research funding from National, International, and Industrial sources. Stephen is Co-Director of the Vertically Integrated Projects for Sustainable Development Programme (VIP4SD) at University of Strathclyde. This programme brings together students from different disciplines and academic levels to work on projects over several years, addressing challenges defined by the UN Sustainable Development Goals. VIP4SD won the International Green Gown award for Student Innovation in a large institution in 2020 and is part of the Global VIP Consortium consisting of more than 50 institutions on six continents.

## **In (Partial) Defence of the "Sage on the Stage:" Why I Teach "Traditional" Political Theory in a "Radical" Problem-Based Module**

**Emma Ahmed-Rengers**

**The London Interdisciplinary School**

Problem-based learning is a core aspect of the interdisciplinary curriculum at the London Interdisciplinary School (LIS). The premise of problem-based learning is that students are given a complex real-world problem to tackle, for which they are asked to identify and acquire "requisite" knowledge from multiple disciplines. This is often contrasted with a "traditional" didactic approach in which the "expert" teacher (the "sage on the stage") decides what the relevant knowledge is, based on the canon of a particular discipline. Yet, if we consider the structure of a complex, real-world problem, with its multiple possible framings and stakeholders, it is not completely clear how students are meant to identify the "requisite" knowledge to tackle the problem. A complex problem itself does not dictate one particular path of inquiry. There is therefore a risk that students will rely on their prior knowledge and perspectives to find a way into the problem, potentially narrowing the scope of the knowledge they consider to be "relevant." If at least one purpose of education is to unsettle students' prior ways of thinking, there might be a role for a more "traditional" teacher, conveying a particular disciplinary perspective, relying on "canonical" disciplinary knowledge after all. This presentation features a case study of a problems-based module on the regulation of artificial intelligence. The module employs a mix of didactic tools, balancing some "traditional" teaching of "canonical" texts from political theory with student-led research and group work.

**Emma Ahmed-Rengers** is an Assistant Professor at the London Interdisciplinary School (LIS), where she teaches legal perspectives on a range of complex problems, including "AI Ethics," "Urban Futures," and "Global Environmental Change." Emma is a legal theorist with an interest in the regulation of emerging technologies, primarily artificial intelligence. She is currently pursuing a PhD in Law with the University of Birmingham. She holds a Master of Law (LLM) from the University of Cambridge and a BSc in Politics, Psychology, Law and Economics (PPLE) from the University of Amsterdam. Before joining LIS, Emma was a Lecturer in Law and Data Science at the University of Birmingham. She also previously taught legal theory, political theory, international law, and philosophy of science at the University of Amsterdam.

## **Lessons learnt from incorporating generative AI in interdisciplinary learning and assessment**

**Iliada Eleftheriou, Ajmal Mubarik and Gabriel Strain**

**University of Manchester**

In this paper, we discuss the approach we followed to incorporate generative AI tools in the students' learning journey including assessment on an undergraduate interdisciplinary module with a wide variety of student backgrounds and levels of technical knowledge. We encouraged students to use and explore these tools, investigate potential applications, challenges, and drawbacks. We provided a set of tutorial workshops to facilitate a critical approach to using generative AI tools, understand how these tools work behind the scenes, and explore the reasons why these tools hallucinate and fabricate results. Students followed an AI Code of Conduct, which was created in collaboration with students and provides a set of guidelines and ground rules for the ethical and transparent use of generative AI tools. Students responded extremely positively and understood the importance of incorporating these novel tools in the curriculum. Challenges arose around marking, detecting inappropriate use of the tools, defining 'acceptable' use, reshaping intended learning outcomes, reliance on technical and domain expertise to identify bias, and fabrication of facts. The interdisciplinary nature of the module brought together students and academic staff from a variety of backgrounds and provides a lens through which we can investigate the multi-dimensional impact of these tools on the learning journey.

**Iliada Eleftheriou** is a Senior Lecturer at the University of Manchester in the School of Health Sciences with a background in Computer Science (PhD). She is leading the AI: Robot Overlord UCIL module and is the Deputy Director of the Clinical Data Science Programme. She has experience in designing and leading interdisciplinary teaching and won a teaching excellence award for driving innovation and co-creating an AI Code of Conduct with students for the transparent and ethical incorporation of generative AI tools in the students learning journey. She specialises in mapping complex data landscapes in healthcare settings to identify and address socio-technical challenges stemming from disparate information systems and data formats. She is a digital consultant at The Christie NHS F.T., a member of the Greater Manchester Combined Authority Information Board and co-leading the health data systems community network of Cancer Research UK.

**Ajmal Mubarik's** research and work is at the intersection of Bioethics, Medical Jurisprudence, Digital Health, Artificial Intelligence, Autonomy, Medical Ethics, Human rights and healthcare disparities. His interdisciplinary experience provides a unique and insightful voice at the forefront of these academic fields. Ajmal used to be a teaching assistant and now is a casual lecturer on the interdisciplinary module 'AI: Robot Overlord, Replacement or Colleague?'. He supported the evaluation of the AI Code of Conduct; a set of guidelines on the ethical use of generative AI in teaching, and worked with students to add an ethical framework lens to the Code.

**Gabriel Strain** is a final year PhD candidate in the Department of Computer Science. His primary research focus is in using experimental methods from perceptual psychology to inform the design of better data visualisations, although he has also carried out work in explainable AI, rendering in virtual reality (VR), and the visualisation of trust. He is currently lead teaching assistant on the UCIL20122 AI: Robot Overlord, Replacement or Colleague? unit, having taught on the unit for the past several years. Additionally, he has taught on a range of units across the Computer Science and Psychology departments, and is a keen proponent of interdisciplinarity and open science in both his research and instruction.

## **Traveling Concepts in the Classroom: Experiences in Interdisciplinary Education**

**Brianne McGonigle Leyh**

**Utrecht University**

Interdisciplinary research is widely valued and practiced within higher education. However, there is less attention on interdisciplinary teaching and learning, and existing examples often focus on problem-based approaches. This paper explores the potential of a concept-based approach to interdisciplinary education, working with the notion of traveling concepts. Traveling concepts refer to the metaphorical traveling or use of concepts within and between disciplines that impacts their meaning, reach, and operational value. The paper provides a theoretical and conceptual framework around traveling concepts, which different educators have used in specific interventions at Utrecht University. Their reflections highlight the importance of interdisciplinarity beyond a problem-solving frame and provide concrete classroom examples to inspire teachers.

**Brianne McGonigle Leyh** is an Associate Professor at Utrecht University's Netherlands Institute of Human Rights (SIM). Her specializations include human rights law, international criminal law, transitional justice, and victims' rights. She is Director of Masters Education of the Law School and a Senior Teaching Fellow leading interdisciplinary education projects. She is a founding member of the interdisciplinary research platform Contesting Governance, on the editorial board of the Netherlands Quarterly of Human Rights, and a Senior Peace Fellow with the Public International Law & Policy Group.

## **Interdisciplinary assessment to shape understanding AND make a difference: The University Living Lab**

**Jennifer O'Brien**

**University of Manchester**

Whilst definitions differ slightly depending upon use, a living lab approach is where Universities partner with organisations to affect change. We argue that students are an undervalued partner – and indeed, force for change – in that approach, especially when working in interdisciplinary groups. For the last six years, students on three of our interdisciplinary Creating a Sustainable World units (UG, PGT) have used our University Living Lab platform for assessment. We have over 150 projects from 50 partners within the University and our local to global communities. All projects are tagged with the United Nation's Sustainable Development Goals. Once completed the platform returns quality research back to the organisation who set it. Any impact made through the research is returned to the student researcher. Impact has ranged from student research on urban resilience presented to the Rockefeller Foundation in New York, to shaping sustainable infrastructure in Manchester via writing strategy for a school in rural Uganda, and many more. Students work in interdisciplinary groups to develop their research plans, which often change significantly as students add insight from different disciplinary backgrounds. This extends a critical, and genuinely different, lens on sustainable development challenges, shaping the students' understanding of the complexities of sustainable development, whilst adding value to the organisation. Our University Living Lab then offers flexible assessment that enhances student experience and employability in an accessible way, whilst facilitating a number of University strategic priorities. We welcome critical discussion about the approach and extend an open offer of partnership.

**Jennifer O'Brien** (NTF, PFHEA) is Academic Lead for Sustainability Teaching and Learning at the University of Manchester, UK. Jen is the Education Lead for Sustainable Futures and directs the University Living Lab which links applied research needed by organisations with students. Working with Education for Sustainable Development, particularly through the United Nation's Sustainable Development Goals, Jen believes that students are a huge force for change particularly through interdisciplinary learning. A development geographer by training, Jen is interested in the intersection between innovative pedagogy and independent field or applied research. Jen inspires and equips learners to ethically address challenges of sustainability, inequality and social justice to affect positive change.

## **Interdisciplinary Assessment as a site for Humanising HE**

**Heather Meyer**

**University of Warwick**

This presentation will address the role of Humanisation in the efficacy of interdisciplinary assessment in Higher Education. It draws on innovative interdisciplinary pedagogies practiced at the Institute for Advanced Teaching and Learning at the University of Warwick, where students and staff collaborate to achieve interdisciplinarity in a holistic manner. This holistic approach includes core features of 'humanising' the experience, which I argue here, has a vital role in the successful application of interdisciplinary and transdisciplinary assessment cycles. This presentation explores how and why interdisciplinarity and humanisation are connected in effective teaching and learning, with a special focus on the assessment/evaluation space and considers the role of 'humanisation' in assessment on both staff and students.

Some of the 'Biggest Challenges' stemming from the design and delivery of interdisciplinary/transdisciplinary assessment come not only from 'signature pedagogies' (Schulman, 2005) inadvertently/unintentionally drawn on from us as practitioners, but also the broader conventions of dislocation, lack of individualisation, passivity and homogenization (Todres et al, 2009; Devis-Rozental & Clarke, 2020) .

**Heather Meyer** is based at the University of Warwick and works as an Associate Professor and Director of Studies at the Institute for Advanced Teaching and Learning (IATL), which is a Department that seeks to provide a radical interdisciplinary curriculum to both UG and PG students. She has a background in International Education and Migration Studies, with a specific interest in how social imaginaries are reproduced in educational spaces, and how this links to questions on inclusion and belonging.

## **Process over product: The use of a workbook to support interdisciplinary learning**

**Betsy Porritt, Abigail Bellamy-Carter and Simon Scott**

**University of Birmingham**

How do we get each student to engage with an interdisciplinary research process? How do we stop students from rushing ahead to practise integration? A challenge in interdisciplinary courses is rewarding students for engaging with the process of interdisciplinary research rather than relying solely on assessing a final interdisciplinary argument. Our paper reflects on our redesign of a module – Interdisciplinarity: Study and Practice – which is taught to second-year students of the Liberal Arts and Sciences programme, University of Birmingham. In this module we teach the Repko and Szostak research process. Throughout the course we use a workbook to breakdown this research process into a series of exercises with which all students are required to engage. The three parts of the workbook broadly align with: interdisciplinary theory, disciplinary grounding, and interdisciplinary practice. The multiple assessment points prioritise engagement and development. We will discuss and reflect on the rationale for introducing the workbook, its content, how it is assessed, and its impact on the way the module uses more traditional forms of assessment.

**Betsy Porritt** is a poet and literary scholar whose research focuses on collaborative and experimental poetics since 1950. She supports students learning interdisciplinary methodologies, practice-based research projects. Betsy is also in charge of the MRes in Interdisciplinary Study.

**Abigail Bellamy-Carter's** background is in surface science, investigating self-assembly and chemical reactions of molecules when confined to surfaces. In addition to this second-year core module, Abigail is the lead for the interdisciplinary final year projects.

**Simon Scott's** research is in the philosophy of interdisciplinarity, and also ancient and continental philosophy. He runs the University of Birmingham's Interdisciplinary Teaching and Learning Group.



## **Codifying measures of integration for learning**

**Mattia Gallotti**

**The London Interdisciplinary School**

Understanding ought to be integrative for it to count as interdisciplinary. In learning design, integration is commonly hailed as a proxy for interdisciplinary understanding. However, emphasis on integration as the method through which interdisciplinary outputs are generated has not yet led to codifying the processes and techniques for integrating knowledge in practice. At a time when ever more outputs are classed as interdisciplinary in quality assessment exercises, the need for clear and shared evaluative standards is a pressing concern for educators and researchers alike.

The purpose of this short paper is to present preliminary work on the assessment strategy of a masters-level (7) course on "Integration" to be taught at the London Interdisciplinary School. This is a 15 credit module aimed at providing students with an understanding of the concept and the measurement of integration. The assessment therefore will purport to be evidence of, not just what integration is on paper, but how it is achieved in the making. Underlying this approach is a certain view, which I call emergentist. According to this view, integration requires a non-reductive, contextual, inclusive, and reflexive methodology. The key learning outcome is the form of understanding that crystallises when someone learns how to swap between mindsets, intentionally and knowledgeably, that is, to navigate liminal mindscapes without certainty of outcome.

**Mattia Gallotti** is a founding Faculty member and the Head of Research and Development at the London Interdisciplinary School.

## **AcrossRCA: a Leap of Faith**

**Chris Mitchell and Tom Sowden**

**Royal College of Art**

This paper reflects on the experience of launching AcrossRCA, an ambitious interdisciplinary unit that supports postgraduate creative arts students to respond to the challenges of living in a complex, uncertain and changing world. This core unit encourages around 2,200 students to make connections across disciplines, think critically about their creative practice, develop networks within and beyond the College, generate innovative responses to complex problems and reflect on the contribution that the creative arts can make to our understanding and experience of the world.

In particular, this paper draws on two iterations of AcrossRCA to reflect on the experience of encouraging students to collaboratively 'try the possibilities of things' on such a scale. This includes discussion of broader themes such as the challenge of embracing pedagogies of uncertainty that invite students to respond with intellect and imagination to such open briefs without fixed points of reference.

**Chris Mitchell** has been Deputy Director of Academic Development at the Royal College of Art since 2019. He has a leading role in the development of new academic frameworks, programmes and pedagogies at the College. This includes leading a range of educational development programmes, including an MEd in Creative Education. He previously worked at the College as Head of Academic Development and Learning and Teaching Coordinator. Before that, he was Manager of the Economics Subject Centre of the HEA at the University of Bristol. His research focuses on the public role of UK higher education. He has an EdD from the UCL Institute of Education, an MA in Online and Distance Education from the Open University and a BSc in Politics and Sociology from the University of Bristol. He is also a Principal Fellow of the Higher Education Academy, and a Fellow of the Staff Educational Development Association (SEDA).

**Tom Sowden** is Assistant Dean (Education) in the Academic Development Office at the Royal College of Art. Tom is responsible for the delivery of cross-College programmes and units, he oversees the Graduate Diploma, MRes RCA, elective unit choice and is academic lead for AcrossRCA: a large collaborative interdisciplinary College-wide unit which supports students in responding to a complex, uncertain and changing world. He joined the RCA to help implement a new College-wide academic model, leading and working with colleagues to develop new programmes, curricula design, and assessment practices. Focusing on an excellent student experience, strategies to enhance the taught portfolio, and sharing best practice, Tom works closely with Assistant Deans across all Schools. Prior to joining the RCA he worked at the University of the West of England as Deputy Head of the School of Art and Design, and Bath Spa University as the Head of Field for Design.

## **Running interdisciplinary engineering MSc dissertation projects: Challenges and how to address them**

**Hosam Aleem**

**University of Manchester**

In spite of the increasing need of industry for engineers with interdisciplinary skills, many engineering departments in UK universities still operate in "silos". Stringent programme accreditation requirements make it difficult to introduce interdisciplinary units on the undergraduate level, hence it was decided to run MSc dissertation projects across two engineering departments as a pilot study.

The department of Chemical Engineering (CE) at the University of Manchester has an impressive pilot plant with realistic industrial processes, while the department of Electrical Engineering (EE) has a strong control systems group. Thus it was decided to run process control projects with one student from each department with one providing knowledge of the chemical process and the other knowledge of the control technology. There are also pedagogical motivations to encourage peer learning.

Whilst the students from both departments finished their projects and passed the unit, they didn't work closely with each other and meet both supervisors together as was hoped. CE was perceived as a source of real life data with not much engagement from EE. This defeated part of the purpose of the project of student learning from each other and tapping into the cumulative knowledge of both academics.

Reasons for this deviation include, a) requirements of both departments were not aligned in terms of expectations, timeline and assessment. B) the time requirements from staff were too high. C) discipline identity of students, and D) cultural/personal nature of the students who were from different parts of the world. Possible solutions are discussed.

**Hosam Aleem** is a teaching focused academic in the department of Chemical Engineering at the University of Manchester. He has a multidisciplinary educational background where he has degrees in Electrical Engineering, Chemical Engineering and Biotechnology. He has worked in the oil and gas industry and the pharmaceutical industry often in multidisciplinary teams. He is a strong believer in multi/interdisciplinary education. Recently he helped establish a department of Pharmaceutical Engineering in a German University which is interdisciplinary between pharmacy and engineering.

## **Training the Integration Experts of the Future: Integrative Teaching and Learning in Inter- and Transdisciplinary Higher Education**

**Sabine Hoffmann**

**Swiss Federal Institute of Aquatic Science and Technology**

Inter- and transdisciplinary (ITD) research is increasingly valued for its contribution to solving complex problems (Leitao 2023), by crossing the boundaries not only of different scientific disciplines, but also of science, policy and practice (Nowotny et al. 2001). Integration across such boundaries is widely seen as the core challenge of ITD research (Bergmann et al. 2005, Klein 2008, Pohl et al. 2008). It also poses challenges in teaching and learning in ITD higher education as students need to be trained in specific integration competencies (Vienni-Baptista and Hoffmann forthcoming).

Given the importance of integration: (i) How can we equip students with the necessary competencies required to address the cognitive, social and emotional challenges of leading and engaging in integration across the boundaries of science, policy and practice? (ii) How can we use our insights from leading and studying integration in different ITD contexts as inputs for designing and implementing integrative teaching and learning in ITD higher education and, vice versa?

We address these questions by providing insights on the core elements of our MSc course "Integration in science, policy and practice: inter- and transdisciplinary concepts, methods, tools" at ETH Zurich (Switzerland) (Vienni-Baptista and Hoffmann forthcoming). We elaborate on the concept of "integrative teaching and learning" as the process in which students but also lecturers jointly develop integration competencies. Our paper will shed light on: (i) what and how we teach and learn about integration, and (ii) how our insights from leading and studying integration feeds into our integrative teaching and learning, and vice versa, sustained in evidence from our own practice in different ITD contexts.

**Sabine Hoffmann**, holds a PhD in Development Studies. She is Group leader of Inter- and Transdisciplinary (ITD) Research at Eawag, the Swiss Federal Institute of Aquatic Science and Technology. Her research focuses on integration and integrative leadership in large inter- and transdisciplinary research programs. Together with Bianca Vienni-Baptista, she co-lectures the master course "Integration in science, policy and practice: Inter- and transdisciplinary concepts, methods and tools" at ETHZ and coined the concept of "Integrative Teaching and Learning" and "Integration Experts" (Hoffmann et al. 2022). She co-leads the ITD Alliance Working Group on Integration Experts and Expertise and is, among others, member of the Scientific Advisory Board of the Network for Transdisciplinarity (td-net), Switzerland, and the Steering Committee of the tdAcademy Steering Committee, Germany.

## **Travelling in the Classroom: Podcasting as an Active-Learning Tool for Interdisciplinarity**

**Tessa Diphooorn**

**Utrecht University**

Interdisciplinarity in the classroom is predominantly championed around a need to address pressing social problems by integrating knowledge from diverse disciplines. But can interdisciplinary teaching take shape without the usual problem-solving frame? And are there new methods/mediums through which to explore interdisciplinarity? These questions have led to new and promising developments related to podcasting, active learning, and interdisciplinarity in the classroom. Through the lens of Travelling Concepts, we reflect on our experiences in the making and using of the podcast series – Travelling Concepts on Air – to better understand interdisciplinarity. We show the value of students not only listening to podcasts as a supplementary means of learning, but also creating podcasts as a form of active learning.

**Tessa Diphooorn** is an Associate Professor at the Department of Cultural Anthropology, Utrecht University, the Netherlands. Her research and teaching focuses on policing, security, and everyday authority. She is currently the co-founder and co-coordinator of an interfaculty and interdisciplinary minor on security 'Reimagining Security'.

## **Open-Innovation for Commons-based Entrepreneurship**

**Suneel Kunamaneni**

**University of Manchester**

Student assessments even within enterprise curriculum has heavily focused on individual assessments because of tensions in group work, student complaints and backlash in module evaluation scores. But open and participatory approaches are very important for social innovation. It is time to move beyond thinking of lone entrepreneurs as singular agents of social change. Our talk will present tools for purpose driven collaborative open-innovation projects that can deliver socio-environmental impact more efficiently and effectively than traditional closed innovation that prioritises proprietary knowledge. Open innovation can encourage students to pursue commons-based entrepreneurial ventures that support public ownership of resources. Enterprise and Entrepreneurship education has largely encouraged individual ideas that demonstrate scalability and are therefore rooted in further extraction and exploitation of resources. The presentation will therefore explore how students can effectively co-create shared solutions for the commons both within curriculum and through extra-curricular Hackathons. The presentation would be useful to anyone who is interested in overcoming challenges to collective action between students from various schools and faculties.

Suneel Kunamaneni obtained his PhD in Polymer physics from the University of Leeds in 2003. He started his career in R&D of advanced materials and specialty chemicals, and continued into commercialisation of eco-innovations, working on various cutting-edge technologies for automotive and construction materials, bioimplants, water-purification and renewable energy. His current interests are in new business models for packaging, agri-food and healthcare. Suneel delivers teaching and training widely across enterprise and entrepreneurship subjects including new-venture creation, technology commercialisation and social enterprise. He has created a template teaching material which can be useful in promoting entrepreneurial activities for sustainable development through rigorous application of analytical planning and decision tools. He is a Senior fellow of the Higher Education Academy (SFHEA) and a fellow of Enterprise Educators UK (FEEUK).

## **Expertise as developed through an interdisciplinary curriculum**

**Rianne van Lambalgen**

**Utrecht University**

In this presentation we will focus on interdisciplinary expertise: how it develops throughout an interdisciplinary bachelor program and how it is mobilized by students after graduation. At Liberal Arts and Sciences, Utrecht University (LAS), we educate our students to become disciplined interdisciplinarians: they gain specialized expertise from a disciplinary specialization of their choice, they gain generalist expertise by taking general education courses in different disciplines and they gain interdisciplinary expertise through the interdisciplinary core courses we offer. In addition, our students learn to reflect throughout our curriculum on different disciplinary perspectives, on interdisciplinarity and on their own learning trajectory through four reflective writing assignments. In this presentation, we discuss how our students articulate their interdisciplinary skills and expertise in their reflective writing assignments, but also how they mobilize their expertise after graduation. We identify different types of disciplined interdisciplinarians, balancing specialist and generalist expertise, depending on the choices they have made throughout and after their LAS-bachelor program. We will encourage the audience to participate in a discussion on the meaning of expertise in an interdisciplinary context, especially where expertise is not reflected in something we possess, but in something we do, or the role we take on (Carr, 2010; Hoffman et.al., 2022). Finally, we will talk about ways to support students to construct a narrative about their own expertise throughout their interdisciplinary program with respect to their future career.

Carr, E.S., 2010. Enactments of expertise. *Annual review of anthropology*, 39, pp.17-32.

Hoffmann, S., Deutsch, L., Klein, J. T., & O'Rourke, M. (2022). Integrate the integrators! A call for establishing academic careers for integration experts. *Humanities and Social Sciences Communications*, 9(1), 1-10.

**Rianne van Lambalgen** is a program leader of the bachelor program Liberal Arts and Sciences at Utrecht University, where students are educated to be disciplined interdisciplinarians. Rianne teaches the interdisciplinary core modules of the LAS bachelor-program and she teaches in the university wide Interdisciplinary Education Teaching Program for teachers. In her research she combines her expertise on psychology, artificial intelligence and educational science by investigating the digital support of learning and teaching interdisciplinary academic skills.

## 5 minute lightning talks | Abstracts and biographies



### Championing Interprofessional Role Modelling

**Clare Clarke, Anjali Vaidyanathan and Sarah Sharp**

**University of Manchester**

The Issue?: 'Human resources for health are in crisis.' (WHO 2010). A few things since 2010 have made the situation worse. In 2023, a record number, 63.08 million people are registered with a GP, whilst numbers of GPs have fallen every year since 2015.

The solution?: One of the most promising solutions can be found in interprofessional collaboration (WHO 2010). Physicians Associates, Advanced Nurse Practitioners and many other community professionals play a vital role in Primary Care. As a Community Based Medical Education Team we ourselves work as an interdisciplinary team, and have a GP championing their allied professional colleagues.

How?: Interprofessional placements for student doctors. Hands on clinical experience with interprofessional teams. In undergraduate community medicine, role modelling collaboration, a Speech Therapist, a Nurse and a GP, are developing training for our community colleagues to support them in facilitating placements for our future doctors. We aim to champion their roles in primary care with students and raise their profile among colleagues.

From lumps bumps and spots (sadly not the focus of this lightning talk) to creating a sense of belonging in University Education, **Clare Clarke** has diverse roles. Lead for Innovation in community placements, Clare's role is to look for different ways of doing things. Championing belonging in University Education has led to Clare, creating a Community Team Near Peer group with plans to expand to a Division Near Peer network, and a student neurodivergence community. "

As a passionate Equality, Diversity and Inclusion advocate, **Dr Anjali Vaidyanathan** is Lead for the Drs in Schools Programme. Widening Participation to medicine across Manchester, Drs in Schools promotes the career to those who may not have access to role models in the profession in their everyday lives. Her investment in staff growth and progression shows in her role as Lead for Staff Development & PRIME, (Professionals in Medical Education) for Community Based Medical Education.

Championing health literacy there is so much to be learned from an interaction with **Sarah Sharp**. Trail blazing interprofessional collaboration Sarah was the first Allied Health Professional to join the undergraduate medicine Community Based Medical Education Team. As Lead for Interprofessional Education Sarah has developed and put in place Interprofessional Community Placements. Thanks to Sarah, student doctors can have invaluable community experiences at charities such as Mustard Tree and the Bread Butter Thing. Compassionate and knowledgeable, she is Associate Lead for Clinical Communication Years 3-5, Division of Medical Education, championing Health Literacy."

### Formula Student as vehicle for learning

**Theodor Heath**

**University of Manchester**

"Formula Student (FS) is a well-established educational engineering competition organised by the Institution of Mechanical Engineers (IMechE) which provides a platform for students to upskill in preparation for their transition from university to industry. FS offers an unparalleled opportunity for students to combine practical engineering skills across multiple disciplines all while developing soft skills in business communication and project management.

There are multiple strands to the competition, but the main event is based around teams of students designing and building, from scratch, a single-seater Formula-style race car. The University of Manchester team, 'Manchester Stinger Motorsports' has been competing at FS since 2005. There are just over 150 student members of the current team, all of whom support the project as an extra-curricular activity.

In this lightning talk, findings from a survey looking into the student experience and graduate outcomes of students involved in the project will be presented.

**Theodor Heath** received the B.Eng. degree in Electrical and Electronic Engineering and the Ph.D. degree from The University of Manchester, U.K., in 2015 and 2019, respectively. Both degrees were sponsored by National Grid, through the IET Power Academy, and then an EPSRC iCASE. Between late 2019 and early 2021 Theo worked for GE Renewable Energy as a power electronics engineer in the HVDC R&D department of Grid Solutions in Stafford, U.K. Since January 2021, Theo has been a teaching focussed lecturer in power and energy at The University of Manchester where he holds the roles of Formula Student Academic Lead, and MEng 4th Year Project Co-ordinator.



## **Students' responses to their peers' contributions on discussion boards: Promoting meaningful interdisciplinary experiences through discussion questions**

**Moises Vieira**

**University of Manchester**

Online discussion boards (DBs) create a fruitful environment for promoting students' engagement with each other and learning materials. Across UCIL units, students are required to respond to discussion questions (DQs) added to DBs and reply to someone else's response while drawing on the unit content. The idea of engaging with another peer's contribution can be rather vague for students, and more often than not responses are simple reiterations which do not fulfil the purpose of activating interdisciplinary learning through meaningful engagement with someone else's post. This lightning talk discusses what criteria UCIL tutors could draw upon to determine whether students are meaningfully engaging with another peer's response to DQs. In doing so, this talk also suggests guidelines for students to effectively interact with their colleagues on DBs, and therefore co-create a space of successful interdisciplinary learning.

**Moises Vieira** holds a PhD in Politics from the University of Manchester. His research interests straddles the fields of migration, ethics and healthcare. He is a lecturer in Politics at Manchester Metropolitan University and a graduate teaching assistant at the UoM, where he teaches on courses in the area of global politics. In addition to that, he has been a UCIL tutor since 2019, helping deliver units on sustainability, digital security, leadership, equality, diversity and inclusion (EDI), among others. He has also been a lead graduate teaching assistant (GTA) on UCIL units, supporting unit leads with GTA training, marking and moderation processes.

## **'I don't know my discipline so how can I do interdisciplinarity?' - The case of the exotic in interdisciplinary plenaries.**

**Oliver Sterland and Catherine Davidson**

**Regent's University**

When we were tasked with creating a core module for all Level 4 students at Regent's entering a new, interdisciplinary curriculum model, we thought we could take the value of interdisciplinarity for granted. Interdisciplinarity was at the heart of our module design, our assessment criteria and our collaboration with colleagues across disciplines. Yet this term itself has proven to be problematic. In this presentation we will share some of the feedback we have been given from faculty and students that problematises the idea of interdisciplinarity, how interdisciplinarity worked and did not work in large plenaries of mixed-discipline student groups, and some of the solutions we are imagining as we plan our next iteration of this core module.

Twice nominated for 'Teaching Excellence' at Regent's University, **Oliver Sterland** teaches academic and employability skills to undergraduate and foundation-level students. With an MA in Online and Distance Education, he has worked as a 'Learning Design Champion' in developing teaching practice at Regent's University London during the pivot to online learning and back again to face-to-face. In addition to module leadership of PER401, Learning Perspectives, the core module for all new students at Regent's, he has been involved in the successful design and delivery of several online courses, including an online PGCHE module for Regents University London and Advance HE-accredited teacher training course. He is a Senior Fellow of the Higher Education Academy.

**Catherine Davidson** was co-leader on the first iteration of PER401, Learning Perspectives, a core module for all new students at Regent's University London. As part of a team of four, she helped conceptualise and design the module, and led interdisciplinary plenaries of up to 100 students exploring questions about critical thinking, communication, epistemology, assessment literacy and academic research. Previously, she ran a Writing Across the Curriculum program and taught academic writing at Richmond University in London. At Regent's she is module leader for the Liberal Arts Capstone and teaches Literature and Creative Writing. She has designed interdisciplinary modules in creativity and narrative for Regent's new curriculum. A writer and a writing coach, she has published poetry and fiction in the UK and the US. She is a Fellow of the HEA.

## **Enhancing students' employability skills while interdisciplinary learning is promoted**

**Maria Limniou and Kat Purdy**

**University of Liverpool**

The presentation aims to discuss how a third-year module assignment on cyberpsychology could promote interdisciplinary learning and support an online consortium for students. A web blog should be created including two posts to 1. critique a target research article, making it suitable for a non-specialist audience, and discuss the impact of an interdisciplinary topic in people's lives; and 2. present themselves to outside university. Through this process, students enhance their employability and digital capabilities skills meeting 21st century demands while the process allows the Department to build a consortium for students promoting disciplinary topics. Furthermore, through resource sharing, consortium students can build a space to efficiently address the needs of other students across the Faculty, Universities and other non-experienced audiences promoting public engagement activities. This consortium creation is in the pilot stage and this presentation will allow the conference audience to exchange ideas regarding the platform and sharing process.

**Maria Limniou** is a senior lecturer in Digital Education and Innovation (Cyberpsychology) at the University of Liverpool (UK) and a Senior Fellow of the UK Advance Higher Education. Her educational research interests include the influence of technology on the teaching and learning process inside and/or outside class. In her most recent journal publications, she discusses the curriculum design process, digital capabilities, multitasking and the influence of technology on the teaching and learning process, especially under the perspectives of how people learn, how people can be facilitated to learn and how technology design assists students to learn.

**Kat Purdy** is based in the Department of Psychology and provides a variety of TEL support for both staff and students. This includes providing technical training for university systems, facilitating the usage of online learning platforms like Canvas, and promoting innovative ways to use them. Kat's areas of interest in Technology include digital accessibility, inclusive education, online and blended learning, and developing digital confidence. She has substantial experience working in IT and has previously worked in further education, where she supported learning technologies and served as the organisation's champion for digital accessibility.

## **'Smart notes for connective thinking' – Liberal Arts and Sciences UU**

**Lou Boshart and Rianne van Lambalgen Elangovan**

**Utrecht University**

In this lightning talk, we will present the 'Smart notes for connective thinking' project at the Utrecht University's bachelor program Liberal Arts and Sciences. The goal of this project is to enable students to connect knowledge from different disciplinary fields, by teaching them how to make smart notes, thereby facilitating their connective thinking required for interdisciplinary learning. Smart notes create a different approach towards information processing. Unlike categorized notes, with smart notes, students are able to link concepts and build a networked structure of the information. Concepts are taken as atomic units, that can later be used to build up arguments and map knowledge through the visual connections of information bites from different disciplinary contexts. In this talk we will share insights on the exercises we are currently piloting for students to become acquainted with the networked quality of a smart notes system, and the basic characteristics of a useful note.

**Lou Boshart** is a student assistant on the 'smart notes for connective thinking' project that he inspired with his experience using the 'smart notes' system. Lou completed the Bachelor's program in Liberal Arts and Sciences at Utrecht University last year. His main academic interest lies in integrating anthropological methodology (his major) with quantitative methodologies in the field of animal experiences. He now works with Dr. Rianne van Lambalgen on the smart notes project at UU.

Rianne van Lambalgen leads the project at UU, and conducts research in interdisciplinary teaching and learning.

## **Interdisciplinary assessment – integrating reflection in finance**

**Patricia Perlman-Dee**

**University of Manchester**

The continuous development of authentic assessment encourages learning. But how can we broaden the learnings? How can we make sure students reflect on and understand the importance of being able to apply knowledge post assessment. When will they take the time to really consider the impact of their learning achieved?

This lightning talk will share how a finance course (so yes, a lot of numbers...) used a reflective qualitative assignment to encourage a shift in mindset and a broader learning. However, what made this assessment unique was the interdisciplinary approach of going beyond the subject of finance and engage and involve staff from other departments to support the students in completing the assignment. The lightning talk will discuss how input from a "reflection expert" impacted the quality and depth of a reflective assignment in a traditionally quantitative subject, truly providing assessment for interdisciplinary assessment.

**Patricia Perlman-Dee**, CFA, is a Professor in Finance at University of Manchester. She has a Masters in Finance, a PGCE and is the Academic Director of Custom Programs at AMBS.

Patricia has extensive experience working in large financial corporations such as Citigroup, JP Morgan, Nomura and Barclays in Manchester, London and New York.

Patricia has created and teaches a range of courses across Undergraduate, Post Graduate, MBA and Executive Education. In 2022, 2021, 2020 and 2019, Patricia was awarded (commended) Faculty of Humanities AMBS Outstanding teaching award.

Patricia is an experienced presenter from her professional career. She regularly presents on national and international educational conferences such as Advance HE and Edulearn conferences. In addition, Patricia has been the key speaker on several large charity functions, helping to raise over £500,000 for the charities.

Patricia is married and has four children. Philanthropy is also a large part of Patricia's life.

## **Designing an Interdisciplinary Rubric: Challenges and Opportunities**

**Jillian Terry**

**London School of Economics and Political Science**

This lightning talk will share some initial ideas around the design and implementation of a rubric for measuring students' interdisciplinary learning. The rubric attempts to capture two key areas of students' learning: their ability to draw on disciplinary insights, and their capacity for making interdisciplinary connections to synthesise knowledge across disciplinary boundaries. Bringing these two areas together into a rubric has important benefits, both for students' awareness and understanding of their development as interdisciplinary thinkers, and for standardising our approach for assessing interdisciplinary learning, especially in large teaching and marking teams. However, designing such a rubric can raise important challenges – if an interdisciplinary mindset can look different for different students, especially those from a diverse range of backgrounds, how can we capture this in a set of rubric categories? This talk will offer some thoughts and takeaways on interdisciplinary rubric design and open up opportunities for further discussion.

**Dr Jillian Terry** is Associate Professor (Education) and Co-Director of LSE100, the sector-leading flagship interdisciplinary course at the London School of Economics and Political Science, taken by over 1800 first-year undergraduate students each year. As an interdisciplinary social scientist, Jillian's research sits at the intersections of feminist theory, international politics, ethics and emerging technology. She is interested in how interdisciplinary education can shape students' experiences of teaching, learning, and their development as creative and critical thinkers. Much of Jillian's work now focuses on interdisciplinary pedagogy and the development of curricula which can help students to address urgent and complex global challenges.

## **The International Conference of Undergraduate Research (ICUR): Undergraduate conferences as interdisciplinary learning experiences**

**Emma Barker and Fiona Farnsworth**

**University of Warwick**

ICUR is an annual hybrid conference organised by IATL at the University of Warwick which celebrates the unique contribution of undergraduates to global research communities. Since its inception in 2012, it has brought together more than 3500 international undergraduate researchers in interdisciplinary panels, providing a supportive yet rigorous academic environment for them to make connections both within and outside of their own fields of study.

In this presentation, we discuss preliminary findings from a study conducted over two years (2019 and 2020) in which ICUR participants from Warwick and Monash University were asked to evaluate different aspects of their research understanding and skills pre- and post-conference. Analysis of survey and interview data shows reports of an increase in connection to disciplines outside their own; an increase in their own skills in communicating to interdisciplinary audiences; and a broader and more expansive appreciation of research practice in different disciplines.

**Emma Barker** is Journal and Conferences Manager in the Institute for Advanced Teaching and Learning (IATL) at the University of Warwick. She manages both *Reinvention*: an International Journal of Undergraduate Research, an online, peer-reviewed journal, dedicated to the publication of high-quality undergraduate student research, as well as ICUR: the International Conference of Undergraduate Research, which is an annual hybrid conference for undergraduate researchers in any discipline around the world. In the ten years working on IATL's student research projects and strategy, she has expanded ICUR to have worked with over 30 institutions across six continents and has developed associated projects focusing on supporting undergraduate research at Warwick and more widely, including *Support the Supporter* – a tool for supporting academics to supervise undergraduate research projects, *Compass* – a peer-to-peer mentoring programme for students seeking to undertake research projects, and managing the hosting of the joint World Congress of Undergraduate Research and British Conference of Undergraduate Research in 2023.

**Fiona Farnsworth** is the Student Research Support Officer (Conferences) in IATL, having joined the department in 2022. While her role is situated broadly within networks of student research, she works primarily on two flagship projects: the International Conference of Undergraduate Research (ICUR) and *Reinvention*, a peer-reviewed journal dedicated to the publication of high-quality undergraduate research. Prior to joining IATL, Fiona completed her PhD in Warwick's Department of English and Comparative Literary Studies. She has taught across four departments – English, SCAPVC, PAIS, and Computer Science and she was proud to win an institution-wide Warwick Award for Teaching Excellence (WATE) for her teaching in 2021/22. Fiona's own research background is in world-literature and narrative form; reproductive labour; world-ecology; and the critical intersections thereof. Within IATL, Fiona seeks to employ and build on her prior teaching and research experience to support undergraduate researchers in changing landscapes of research, dissemination, and impact.

## **The write way forward? Creative writing and teaching environmental politics**

**Jeremy Moulton**

**University of York**

There is much in the teaching and learning on political science courses that is centred on real-world, qualifiable and quantifiable phenomena. However, the field of environmental politics can ask students to delve into a world of "what ifs": what will our lives be like if we don't stop environmental degradation? What changes to our societies will we experience if we do take the steps to halt environmental harm? This can be an abstract and alien experience for those that otherwise focus on concrete experiences and practice in their learning and analysis on political science courses. This lightning talk therefore addresses the benefits of employing an interdisciplinary approach to teaching and learning on environmental politics courses by employing creative writing exercises to promote student imagination and engagement with key themes in environmental politics. The talk will reflect on my own experience utilising this interdisciplinary method in both undergraduate and postgraduate teaching.

**Jeremy Moulton** is a Lecturer at the University of York's Department of Politics and International Relations and is a Senior Fellow of the Higher Education Academy. His teaching and research focus on environmental and European Union politics, as well as the scholarship of teaching and learning.

## **Student co-creation in an interdisciplinary context: Lessons from a learner/observer**

**Saniya Khosla and Elaine Clark**

**University of Manchester**

The last decade has seen rising interest within Higher Education in 'students as partners' and co-created learning and teaching (Cook-Sather et al., (2014), Dunne (2016), Mercer-Mapstone et al., (2017), Bovil (2020).

This lightning talk will be delivered by one of the University of Manchester's student interns, who has worked in partnership with academic staff to create a blended unit on 'Communicating with Confidence', designed to enhance student's confidence in communication.

The talk will explore the specific challenges and opportunities in working to co-create across subject disciplines: what roles does a student intern need to take in order to navigate these and what were the pedagogical gains/impact for students and staff alike? How can this approach be scaled up to enable wider and systematic co-creation with all students on the course?

**Saniya Khosla** is an international student from India studying psychology at the University of Manchester. She is currently on placement with the University College for Interdisciplinary Learning (UCIL) in the role of Project and Marketing Assistant. One of the projects Saniya was involved in was the student co-creation of the upcoming blended unit of Communicating with Confidence led by Dr. Elaine Clark. This unit draws from various disciplines including Biology, Psychology, Theatre and many more. Saniya's role involved helping re-develop the workshops of this unit and providing constant feedback on each module so that the students are fully supported throughout the unit - this work is what the talk is based upon.

**Elaine Clark** is the course director for the University College for Interdisciplinary Learning, Manchester's 'Communicating with Confidence' course. This course is currently being adapted, with the help of Saniya and members of the UCIL team, to a blended unit and it draws upon Elaine's previous training and background as a professional actress, followed by study and working as a psychologist.

## **Creating interdisciplinarity**

**Linda Robson**

**The Open University**

Use and understanding of the term "interdisciplinarity" is both complex and contested. It has been variously defined as an approach which 'draws on more than one discipline's perspective to synthesize a more comprehensive understanding' (Newell, 2001), or a set of practices which 'do not unnecessarily constrain theories, methods, or phenomena [to the] context of disciplinary perspective' (Szostak, 2015).

This lightning talk will present outputs from a series of workshops in which colleagues explored the concept of interdisciplinary and sought to harness creative approaches to develop and share their understanding.

**Linda Robson** (Open University) is Qualification Director of the MA/MSc Open and Chair of the undergraduate module YXM130: Making your learning count, both of which offer students flexibility to select curriculum to suit their individual learning goals.