



# Sustainability

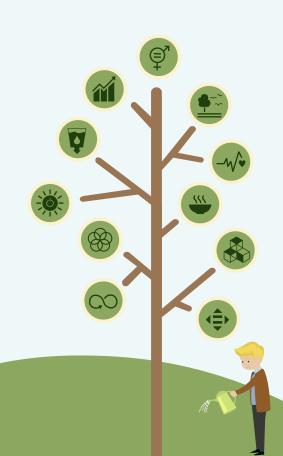
L&T Conference 2025

Thursday 26 June



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# **Timetable**

This year's timetable will feature ignite sessions, roundtable discussions and workshops on the topic of sustainability, with posters and slideshows displayed during the breaks and lunch. Lunch will be provided and we will have networking opportunities throughout.

### **Timetable**

09:15 - 09:35	Registration
09:35 - 10:45	Welcome and Keynote Speaker  Professor Douglas Bourn, Professor of Development Education, IOE - Curriculum,  Pedagogy & Assessment
10:45 - 11:00	Break
11:00 - 11:45	Ignite Sessions  Parallel 1 Parallel 2 Parallel 3 Parallel 4
11:45 - 12:00	Break
12:00 - 12:45	<ul> <li>Parallel Workshops</li> <li>Beyond the Headset: Creating Sustainable Change-Makers with VR</li> <li>Embedding Academic Support and Developing Sustainable Competencies</li> <li>Education for Sustainable Development (ESD) community of practice</li> </ul>
12:45 - 13:45	Lunch
13:45 - 14:30	<ul> <li>Parallel Workshops and Roundtable</li> <li>Quality Improvement in Medical Education</li> <li>Nurses as agents for achieving environmentally sustainable health care through evidence based practice</li> <li>Carbon literacy in the curriculum pilot project</li> </ul>
14:30	Finish

# Keynote Speaker

Prof Douglas Bourn | Professor of Development Education, University College London

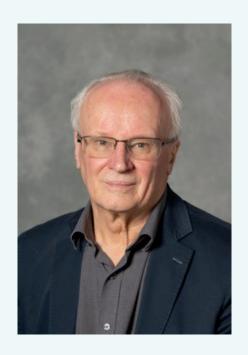


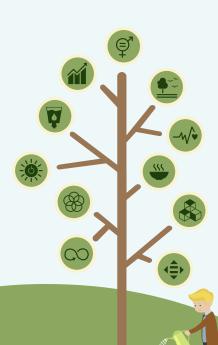
#### Pedagogy of Hope for Global, Social and Environmental Justice

Professor Doug Bourn, Professor of Development Education, IOE - Curriculum, Pedagogy & Assessment

We are living at a time of what could be called a climate crisis and many young people around the world are concerned about the future of the world. This has led to the use of the term eco-anxiety. This keynote will review the debates around the usage of this term and suggest that a critique is needed that goes beyond individualistic responses to one that locates understanding of these challenges within a pedagogy of hope. Influenced by the ideas of Paulo Freire and Henry Giroux this lecture will outline how literature and educational practice from within education for sustainable development and global citizenship education can provide a framework for engaging learners to see how they can make a positive contribution to education for social change.

Further information about Professor Bourn's work can be found at: <a href="https://profiles.ucl.ac.uk/48915-douglas-bourn/publications">https://profiles.ucl.ac.uk/48915-douglas-bourn/publications</a>





# **Ignite Sessions**

Ignite sessions are a quick-fire way of delivering a presentation.

An Ignite session framework allows presenters to think creatively about the way they present their material so that they remain coherent, concise and focused. It also helps audiences to easily follow and understand the concept without losing their thread or attention.



#### Introducing a Sustainable Patient Pathways workshop

Anna Stickland, Nicola Dowling and Adrian Bellwood

We plan to share how we developed a Year 2 MBChB workshop introducing students to Sustainable Patient Pathways. During this workshop we support students to learn about the use of pathways to facilitate delivery of effective care, common areas of wastage in the NHS and potential opportunities for lean pathways to improve sustainability when delivering patient care. We will share our experience of developing and delivering this workshop.

# Sustainable clinical education: Rethinking Peer Examination in medical training

Catherine Freeman

Peer examination is a way in which we can teach our students without the need to incur additional costs or rely on third party assistance. Using the definition of sustainable as 'the quality of being able to continue over a period of time', peer examination has been a part of our curriculum in the school of Medicine for over 30 years. It relies solely on the resources that we have on site already, our students, and the knowledge and support of our staff. I have looked into, within my project, ways in which our university compares to others in this regard and their feelings on the matter as practitioners.

# From clinic to classroom: using live-streamed GP consultations in medical education

Matthew James and Duncan Rogers

The School of Medicine piloted an innovative approach to Year 3 General Practice placements by live streaming GP clinics from regional practices to small student groups on campus. Facilitated by a GP, these sessions aimed to enhance clinical reasoning and observational learning. This model also reduced travel demands and environmental impact, as students typically journey to placement sites by car or public transport. We will outline the session format and share initial feedback from both students and educators. It will also address key challenges, including implementing new technology, ensuring clinical governance, and managing data protection and patient confidentiality.

# Enhancing Prompt Literacy: Evaluating Student Efficiency in Using GAI Tools

Heather Johnston and Bryony Parsons

Using relevant prompts is essential to be as efficient and sustainable as possible when using GAI tools. We will discuss the results of our project in which we evaluated how students used prompts within different GAI tools to complete a variety of tasks, and then the extent to which they critically evaluated the outputs. We will also consider the impact of our KnowHow GAI tutorial on student prompt literacy to enhance efficiency when using GAI.

# Embedding decolonisation and decarbonisation into teaching and learning; The importance of incorporating student perspectives

Lizzie Larner

LGoS in collaboration with SOS-UK run a curriculum mapping programme where student volunteers assess the integration of the UN's SDG's and other ESD methodologies in their teaching. In 2024, building on the programme's success, additional decolonisation criteria were devised by students and integrated into the mapping process. Join us to explore the development and results of this methodology and how findings can be integrated going forward.

# Helping students to grow: Reflections on an on campus student-led gardening space

Lizzie Larner and Ollie Walford

The Oliver Lodge Garden is a garden space at the heart of the University campus which provides raised beds where student volunteers can grow their own food. In this session we want to showcase the successes of the garden in terms of food grown as well as partnerships developed, and communities built from it. The garden is a great example of teams across the University and Guild coming together to provide a chance for students to engage with sustainability on campus.

#### Sustainability in Clinical Skills

Emma McCabe

In CSTLC a lot of equipment is purchased, used and disposed off, most of which is plastic. Unlike clinical practice where equipment is disposed of immediately after use due to contamination; a lot of teaching is done with manikins and there is no real contamination risk involved. Equipment can be cleaned, repackaged and reused, without compromising the students learning. CSTLC are making this change to minimising the purchasing and disposing of equipment and reduce the environmental impact.

# Encouraging Second-Year Veterinary Students to think about Sustainability

Laura Kennedy and Amal Abdulkadir

The potential impact of sustainability awareness in veterinary practice is significant, influencing animal care, public health, and the environment. Our embedded curriculum activity helps second-year students develop and pitch their own sustainability solutions, as well as evaluating their potential impact. In this talk, I'd like to present how we've continually improved these sessions and where we hope to take them in future.

# From disruption to recovery: the role of extenuating circumstances in supporting student resilience

**Eunyoung Moon** 

This research examines the Extenuating Circumstances (EC) policy's role in supporting student resilience. Analysing data from 1,041 ULMS students, the study finds that while EC provides temporary relief, it does not offer sustainable long-term support. The findings highlight the need for more enduring, sustainable policies that help students recover and thrive beyond short-term disruptions.

# Building a 70hr Sustainability Virtual Work Based Experience with Orsted

Jennifer Foden

Orsted have worked with C&E to help us put together an on demand 70 hour work based experience, hosted on H5P. I am currently working with them on the sustainability project brief but the output will be a stakeholder engagement plan as well as a recorded vlog of their findings. Research is around the positive impact of building an off shore wind farm, taking into consideration local and national stakeholders.

# From Chatbot to Colleague: The Evolution of AI Agents in Sustainable Learning Support

Etieno Enang, Rob Lindsay and Will Moindrot

This ignite talk explores the potential of generative AI (GenAI) tools, specifically custom GPT-based chatbots, to cultivate sustainable learning practices in higher education, aligning with the University of Liverpool's commitment to addressing global challenges. We present two case studies deploying AI agents as "new members of the teaching team" to provide scalable, personalized support in large-cohort business modules. Our findings indicate that effective GenAI integration requires deep curriculum alignment, a student-centered design approach, and a focus on equitable access by embedding AI tools within existing learning environments. Critically, we demonstrate how these AI agents can move beyond simple query answering to foster higher-order cognitive engagement, prompting self-explanation and reflection among students. This collaboration with AI can contribute to a more sustainable model of teaching by empowering student autonomy, reducing instructor workload for routine tasks, and enabling educators to concentrate on developing crucial skills for a sustainable future, such as AI literacy and ethical reasoning.

# **Workshop Sessions**

Workshops are participative and interactive in nature, participants will work actively together towards a particular objective, whilst learning something new.

Activities will prompt reflection and provide participants with an experience that is conducive to development of new knowledge, or understanding of and approaches towards an issue.



# Beyond the Headset: Creating Sustainable Change-Makers with VR

Terry McNulty, Will Moindrot and Matt Ashton

We will present our experiences of using VR on the Management School MBA programme, focusing on how immersive scenarios can foster critical thinking and ethical decision-making in the context of sustainability challenges, particularly in the areas of corporate governance and ESG (Environmental, Social, and Governance) factors. This approach also exemplifies sustainable teaching practices by offering efficient, high-quality learning experiences here on campus at Liverpool, without the environmental costs associated with extensive travel. Crucially, it provides equitable access to experiences that would otherwise be inaccessible to most students.

We will demonstrate the use of "Merging Realities," a VR boardroom simulation where students grapple with complex decisions, including those related to Environmental, Social, and Governance (ESG) factors and sustainable business practices. This allows students to experience the weight of corporate decisions and their potential consequences in a safe but realistic environment.

We emphasise that VR complements, rather than replaces, traditional pedagogy. Our approach integrates immersive VR experiences with robust lesson design and classroom discussion, ensuring that technology enhances, not dominates, the learning process. Our platform enables effective management of large cohorts and provides valuable data on student interactions. It is designed to function within the constraints of typical university infrastructure, making it a viable and long-term solution for bringing VR to campus.

# Embedding Academic Support and Developing Sustainable Competencies

Katie Hudson, Vicky Garner and Abigail Sefton

We will briefly present our successful collaborative teaching approach which integrates academic skill-building directly into subject teaching and which aligns directly with UNESCO's key sustainability competencies. By embedding tasks that blend discipline-specific knowledge with reflective, student-centred activities, we have been able to promote critical thinking, systems awareness, and self-reflection in authentic ways. Together, these elements build a holistic, skills-based approach that equips learners to tackle complex healthcare challenges sustainably and with greater professional resilience. We will facilitate an idea-sharing workshop inviting educators to co-construct ideas for adapting this model in their own programmes. The co-facilitating structure – of lecturer and academic support tutor and student – will mirror the experimental co-teaching approach which fosters genuine collaboration and active learning.

Attendees will leave with practical insights and inspiration to embed a similar sustainable pedagogy within their own programmes. Opportunities to share experiences, troubleshoot challenges, and form connections with colleagues from other departments.

# Education for Sustainable Development (ESD) community of practice

Pippa Hunter-Jones and Nick Bunyan

This workshop will provide an opportunity to explore and discuss how we can collectively enhance staff engagement with Education for Sustainable Development (ESD) to support the relevant objectives within Strategy 2031 and recently revised QAA subject benchmark statements. Current staff support resources for ESD will be reviewed including ESD toolkit, the online community of practice in Teams, and new opportunities through the Sustainability Teams new Living Labs project for example, will be presented. All staff are welcome to attend this workshop including staff new to ESD who want to explore its application in their subject area. The goal is for everyone attending to leave with one tangible action point relevant to their particular circumstances.

The workshop will consist of a range of activities including table discussions, whole group discussions and use of polling technologies to canvas agree future actions for the community of practice.

#### **Quality Improvement in Medical Education**

Anna Stickland, Andrew Corley and Rosalind Benson

In this workshop we will share how we introduced Quality Improvement (QI) teaching to the MBChB curriculum. QI was introduced in healthcare following a history of use in other industries. The essence of the QI approach is to look at systems methodically to improve both process and quality outcomes. In healthcare we look to improve markers of quality including sustainability; to optimise use of resource, minimising wastage. We will share how we developed a series of learning episodes starting with a pre-session online worked example of a FYI doctor who wants to improve recycling in medicine. This is followed by an in-person activity based workshop building on use of the Model for Improvement, which we use to support students to work through authentic example problems from healthcare settings. This methodology aims to support students' ability to effectively define problems and effect positive change. We provide post-session resources to enthuse and support students so that they can apply this to their clinical practice in Y5 and beyond. A working understanding of QI is expected of our medical graduates, in preparation for post-graduate training.

Within this conference workshop we will share the structure that we use to deliver QI learning within our programme so that workshop participants can consider the value to their own programmes and how this might support their graduates in their future careers. Workshop participants will consider how they could adapt our structure and methodology into their own subject specific disciplines.

### Carbon literacy in the curriculum pilot project

Alex Buchanan and Nick Bunyan

Based on a recent pilot project developed using the Carbon Literacy Project toolkit for higher education, carbon literacy training for archives and the Carbon Literacy Trainers programme, this workshop will be an opportunity to explore the benefits and practical issues associated with developing students carbon literacy within your learning and teaching. The workshop will outline the pros and cons of the Carbon Literacy Project process for students to gain a carbon literacy micro-accreditation and explore possible alternatives that might be more appropriate for certain subject areas. All staff interested in this important topic are welcome to attend the workshop although it is most suited for staff who currently include carbon literacy or are intending to include carbon literacy in their teaching. The project outlined in the workshop is designed to be complementary to any future institutional staff and student carbon literacy training initiatives.

Participants will be invited to discuss and review their current use of carbon literacy education, and asked to identify practical actions as an outcome from the workshop.

# Roundtable Session

Roundtables will be held in a seminar-like format where participants are invited to discuss a topic, issue, approach, or piece of new research tabled by a presenter or group of presenters. The presenter will outline the framework of the topic for discussion for between 5 and 10 minutes, and an independent moderator will then invite contributions from the rest of the group to discuss what has been presented.



### Roundtable

# Nurses as agents for achieving environmentally sustainable health care through evidence based practice

Carolyn Lees and Katie Hudson

Nurses can influence change and promote global sustainability through research, the application of evidence-based practice and the promotion of positive health outcomes.

The MSc Nursing programme offers students from across the globe a global perspective on sustainable healthcare.

With the support of the English Language Centre students develop the skills to enable them to address globally significant healthcare issues through their ability to:

- Appraise research to influence health outcomes
- · To communicate effectively to maximise the impact of nursing interventions

The objectives for the round table discussion:

- To debate the role of nurse education in developing the skills required to facilitate nurses to become change agents using the United Nations Sustainable Development Goals
- To identify how collaborative teaching with support from the English Language Centre can enhance the development of a curriculum for all, sustainable and inclusive in its content and delivery.

# **Lunch Time Displays**

There will be an opportunity over lunch to engage and network with staff from across the University as well as meet members of the Centre for Innovation in Education. There will be some hands-on demonstrations as well as slideshows and posters.

Conference posters will be displayed in the social area the 502 Teaching Hub and are there to start a debate, raise awareness of an issue and highlight the work of University colleagues. This is an opportunity to view staff projects or research taking place across campus.



### **Posters**

### The use of AI Patients in Facilitated Clinical Skills A Staff Survey

The use of AI patients in Medical Education has a positive environmental impact and mitigates our carbon footprint. It facilitates the creation of innumerable patients with wide ranging medical conditions, increasing students' exposure to disease and illness in a safe environment. The poster presents the findings of a survey on the use of this technology in the Clinical Skills Teaching & Learning Centre within the School of Medicine at the University of Liverpool.

# Does a quicker turnaround in marking and feedback improve student satisfaction?

Kelly Ross

The poster examines the impact of a strict three-week feedback turnaround policy on student satisfaction in the School of Biosciences at the University of Liverpool. Using NSS data from 2016 to 2024, the study evaluates whether a quicker feedback process improves student satisfaction with assessment and feedback. Findings indicate that despite the policy implementation in 2020/21, overall satisfaction scores in assessment and feedback declined, reaching a low of 68.4% in 2023.

# Sustaining Peer-Assisted Learning: Adapting for the Future Gita Sedghi, Michael Gillin and Harry Palmer

Our poster will demonstrate how Peer-Assisted Learning (PAL) has been sustained over the years through adaptive coordination, digital resource management, and sustainable printing practices. By optimising attendance tracking, reducing paper waste, and streamlining online resources, PAL remains an effective and enduring student support system. This aligns with the conference theme by showcasing sustainable teaching practices that ensure long-term student engagement and resource efficiency.

### Slideshows

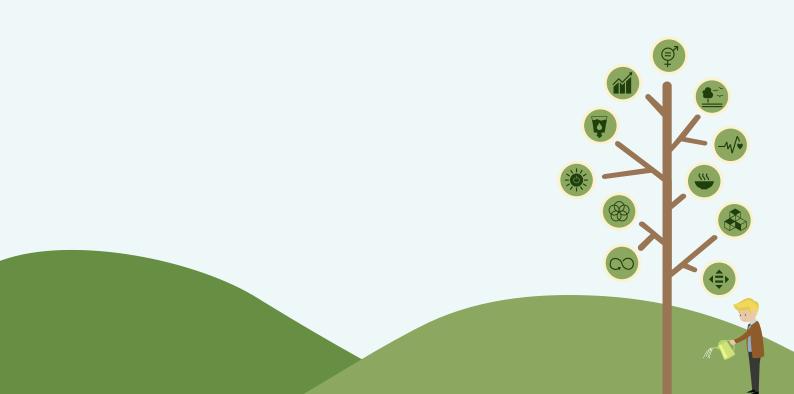
# Task and Share - a methodology for sustainable teaching and learning- in Architecture studio and beyond

Sandy Britton

Emerging pedagogy 'Task and Share, a methodology for Architecture Studio teaching and learning' has been previously well received as an adaptable framework in Supporting Student Success. The author here continues the 'Task and Share' proposition with discussions turning to attributes as a sustainable teaching methodology and as a mechanism to embed sustainability into the teaching and learning of architecture studio and beyond. A 'Book of Tasks' has been accepted for international publication.

Year in Industry as EDI strategy: How multidisciplinary scholarship showed placements narrow awarding gaps and led to new strategies for widening participation

Kerry Traynor



### **Presenters and Contributors**

#### **Ignites**

Introducing a Sustainable Patient Pathways - Anna Stickland, Nicola Dowling and Adrian Bellwood

Sustainable clinical education: Rethinking Peer Examination in medical training
- Catherine Freeman

From clinic to classroom: using live-streamed GP consultations in medical education - Matthew James and Duncan Rogers

Enhancing Prompt Literacy: Evaluating Student Efficiency in Using GAI Tools - Heather Johnston and Bryony Parsons

Embedding decolonisation and decarbonisation into teaching and learning;

The importance of incorporating student perspectives - Lizzie Larner

Helping students to grow: Reflections on an on campus student-led gardening space - Lizzie Larner and Ollie Walford

Sustainability in Clinical Skills - Emma McCabe

Encouraging Second-Year Veterinary Students to think about Sustainability -Laura Kennedy and Amal Abdulkadir

From disruption to recovery: the role of extenuating circumstances in supporting student resilience - Eunyoung Moon

Building a 70hr Sustainability Virtual Work Based Experience with Orsted - Jennifer Foden

From Chatbot to Colleague: The Evolution of Al Agents in Sustainable Learning
Support - Etieno Enang, Rob Lindsay and Will Moindrot

### Workshops

**Beyond the Headset: Creating Sustainable Change-Makers with VR** - Terry McNulty, Will Moindrot and Matt Ashton

Embedding Academic Support and Developing Sustainable Competencies - Katie Hudson, Vicky Garner and Abigail Sefton

**Education for Sustainable Development (ESD) community of practice** - Pippa Hunter-Jones and Nick Bunyan

**Quality Improvement in Medical Education** - Anna Stickland, Andrew Corley and Rosalind Benson

Carbon literacy in the curriculum pilot project - Alex Buchanan and Nick Bunyan

#### Roundtable

Nurses as agents for achieving environmentally sustainable health care through evidence based practice - Carolyn Lees and Katie Hudson

#### Posters and Slideshows

The use of Al Patients in Facilitated Clinical Skills A Staff Survey - Matthew McGinn

Does a quicker turnaround in marking and feedback improve student satisfaction? - Kelly Ross

**Sustaining Peer-Assisted Learning: Adapting for the Future** - Gita Sedghi, Michael Gillin and Harry Palmer

Task and Share - a methodology for sustainable teaching and learning- in Architecture studio and beyond - Sandy Britton

Year in Industry as EDI strategy: How multidisciplinary scholarship showed placements narrow awarding gaps and led to new strategies for widening participation - Kerry Traynor

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