

Higher Education Teaching and Learning Series 2026



INSTITUTE OF
MATHEMATICS &
ITS APPLICATIONS



LONDON
MATHEMATICAL
SOCIETY
EST. 1865

ROYAL
STATISTICAL
SOCIETY
DATA | EVIDENCE | DECISIONS

29 April

**Making the Transition: Supporting
Mathematicians Moving into Education
Research and Pedagogical Scholarship**

University of Leeds

01 June

**A Mathematical Sciences Curriculum in the
Age of Generative AI**

University College London

08 June

**Producing and Designing Accessible HTML
Course Materials**

University of Edinburgh

30 June

**AI as a learning tool in Quantitative
disciplines: Dissertation to Career and the
skills that matter**

University of Southampton

06 July

**Engaging with Students as Partners in the
Mathematical Sciences**

University of Manchester

29 April

Making the Transition: Supporting Mathematicians Moving into Education Research and Pedagogical Scholarship University of Leeds

Are you a mathematician curious about education research, but unsure where to begin?

Whether you're an early-career academic launching your first education project, or an established colleague ready to shift your research focus, this one-day workshop is designed for you.

Mathematics education research is a field with real institutional momentum, but the transition from disciplinary research to pedagogical scholarship comes with real challenges: unfamiliar methodologies, new funding landscapes, different publication norms. This workshop addresses exactly those challenges, providing practical, expert-led guidance on how to make the transition successfully.

What you will gain

- Insight into how your mathematical research skills translate directly into rigorous education research.
- A realistic picture of career pathways in mathematics education, from colleagues who have made the journey.
- Practical guidance on **securing funding, designing studies, collecting and analysing data, and publishing** in mathematics education journals.
- Connections with peers navigating the same transition - with potential for collaborative research partnerships.
- Strategic advice on career progression in mathematics education research.

For full details and to register, please visit the workshop webpage:

[Making the Transition: Supporting Mathematicians Moving into Education Research and Pedagogical Scholarship](#).

For any enquiries, please contact Dr Costas Loizou: c.loizou@leeds.ac.uk and Professor Kevin Houston: K.Houston@leeds.ac.uk.

01 June

A Mathematical Sciences Curriculum in the Age of Generative AI University College London

The rapid development of generative AI is transforming what it means to study and apply mathematics and statistics. Tasks that were once thought of as fundamental for the discipline, including symbolic manipulation, computation, and even aspects of data analysis and interpretation, can now be automated or simulated. This raises a fundamental question: what is the purpose of a mathematics or statistics degree in the age of AI, and how should this shape what and how we teach?

In this workshop we will examine:

- What knowledge, skills, and habits of mind are still essential to the mathematical sciences, and which may need less emphasis?
- How should we be teaching, including the potential for AI to support deeper mathematical learning, and how do we help students develop productive, critical and ethical engagement with AI?

This event aims to keep up momentum from the recent The Future of Mathematics Higher Education event and produce concrete recommendations for curriculum change.

For any enquiries, please contact Dr Ruth Reynolds:

ruth.reynolds@ucl.ac.uk and Dr Takoua Jendoubi: t.jendoubi@ucl.ac.uk.

08 June

Producing and Designing Accessible HTML

Course Materials

University of Edinburgh

This workshop follows the successful Accessibility of Maths for Visually Impaired People workshop in Glasgow in June 2024, with a practical focus on producing accessible HTML content. A recent national survey by the JISC Accessible Maths network highlighted demand for in-person workshops to support lecturers and learning technologists in adopting and promoting best practices.

There is growing interest in creating HTML content for mathematics to help meet legal accessibility requirements, and more generally to provide flexible display options for users with different needs. It also allows the integration of new functionality (e.g. quizzes, interactive graphics), bringing valuable pedagogical opportunities.

Demonstrations and hands-on sessions will focus on a small number of software tools to produce mathematical content in HTML, chosen for their technological maturity, accessibility features, and level of adoption (examples include BookML, Chirun, Quarto, and STACK). This will ensure that participants get enough hands-on time with the software, and that they will be supported by high-quality developer documentation and peer support after the workshop, contributing to building the critical mass of users and advocates needed for wider sector buy-in.

Finally, this workshop would be a networking event for those interested in improving digital provision for mathematics and its implementation across the higher education sector. Time for both personal and general discussion will be built into the workshop, allowing for new themes, best practices and shared interests to be identified, built on, and supported through further workshops in what we hope will become a series.

For any enquiries, please contact Dr Charlotte Desvages at:

charlotte.desvages@ed.ac.uk.

30 June

AI as a learning tool in Quantitative disciplines: Dissertation to Career and the skills that matter

University of Southampton

As generative artificial intelligence reshapes how students learn, conduct research, and develop analytical skills, Higher Education Institutions are re-evaluating their teaching and assessment strategies. These debates are particularly pressing in quantitative fields.

In this workshop, we examine how generative AI can be integrated as a learning and research companion across the dissertation process within quantitative disciplines. Particular attention will be given to how generative AI can help students strengthen core competencies which are highly valued in the job market, including quantitative analysis, critical thinking, and data literacy. At the same time, we will reflect on the skills that remain fundamentally human, such as the ability to communicate research effectively in interdisciplinary settings, and how these shape not only how we teach, but also, indirectly, WHAT we teach. While we will briefly acknowledge the broader implications for curriculum design, the workshop primarily focuses on HOW AI can practically support learning in quantitative subjects.

Because the dissertation integrates learning across the curriculum, the workshop is relevant to support students at different stages of their programme and highlights how AI can enhance both learning and research practices.

For any enquiries, please contact Professor David Gammack:

d.gammack@soton.ac.uk.

06 July

Engaging with Students as Partners in the Mathematical Sciences

University of Manchester

The increasing importance of the student voice in shaping higher education is evidenced by the inclusion of student voice questions in the NSS, the student submission to TEF 2023 and Principle 2 'Engaging with students as partners' of the QAA Quality Code 2024. Working with students as partners (SaP) to develop teaching, learning and assessment and improve the student experience has proved highly effective in mathematics departments.

This workshop will bring together colleagues in the mathematical sciences who have successfully worked with student partners and those who are interested in developing SaP activities in their institution. As well as sharing examples of good practice, the workshop will provide time for attendees to explore opportunities to develop SaP activities in their institutions and potential collaborations across the mathematics community.

Speakers:

- Prof. Chris Brignell, Deputy Director of the Observatory for Mathematical Education, University of Nottingham
- Dr Ioanna Papatsouma, Imperial College London
- Prof. Louise Walker, University of Manchester
- Sarah-Sonia Balan, student partner, University of Manchester.

The workshop will run from 10:30 – 16:30.

Please register for the workshop at: [Engaging with Students as Partners in the Mathematical Sciences – Fill in form.](#)

Spaces are limited. The deadline for registration is 17:00 on Friday 19 June 2026.

For any enquiries, please contact Professor Louise Walker at: Louise.Walker@manchester.ac.uk.