MEI®

Because maths matters!

Impact Report 2024-25

"At MEI, we are a charity that transforms lives through maths education. As Chair of Trustees and Chief Executive we get to influence and witness how our work helps create a society where everyone can become proficient in maths and no-one is held back by poor maths skills. At the heart of our work is a drive to improve the quality and rigour of maths education and teaching. Through our many projects, we support teachers and pupils from primary to post-16, and provide training, competitions, resources and more.

Meeting high expectations for children, young people and adult learners is challenging, but it brings rewards. Thanks to the hard work and passion of organisations like MEI and the dedication of maths teachers across the country, we're seeing an improving picture in terms of outcomes and England's position internationally. This report highlights some of the work that MEI has done over the last academic year and celebrates the reach and impact of our work."

Professor Vicky Pope
Chair of Trustees, MEI

Charlie Stripp MBE, FIMA, FRSA
Chief Executive, MEI

Contents

In numbers 2024–25

2,062
State school students received 20+ hours of support for university maths progression

2,782
State-funded schools and colleges engaged with the Advanced Maths Support Programme

49,200
Hours of teacher CPD were provided by the AMSP

590
FE teachers took maths CPD courses

1,718 teams across **21** countries
Took part in Ritangle

700
Students took part in workshops as part of the mA*ths and Further mA*ths programmes

626
Girls attended one-day events to support their progression to maths degree courses

3 in every 5
FE colleges in England took part in the FE Maths Challenge

55,089
Students accessed maths courses on Integral

95%
Percentage of students who enjoyed the Data Science Taught Course

Over 61%
Percentage of schools in England who worked with their Maths Hub

539
Students from disadvantaged backgrounds benefited from the Maths Progression Programme

98%
Percentage of delegates who rated the MEI conference as good or excellent

60
New secondary resources created for the Big Earth Data Project

475,809 Oak maths lessons downloaded by teachers

The Advanced Mathematics Support Programme (AMSP)

Via the Advanced Mathematics Support Programme (AMSP), we aim to increase participation in AS/A level Mathematics, Further Mathematics and Core Maths, and support excellence in the teaching of these Level 3 maths qualifications. We provide national support for state-funded schools and colleges in England and offer targeted support for schools with a high proportion of students from disadvantaged backgrounds and low participation in Level 3 maths. This means all students have the opportunity to progress and excel in maths post-16.

Teachers, and subject and school leaders, can access an extensive range professional development courses and other support. We also provide Further Mathematics tuition where schools are not able to provide this, and a range of activities and resources for students to help them succeed and progress in maths.

In 2024-25

We worked with over **3,000** teachers & **10,000** students

98% of participants reported a positive impact on their teaching

Spotlight: Subject Knowledge Live

Subject Knowledge Live AS Maths: Pure Absolute Beginners is a live online professional development course. MEI's expert maths specialists model subject knowledge teaching, covering content from all major AS Mathematics specifications. 12 online sessions take place across a term, and participants have access to course-specific teaching and learning resources via the Integral online platform.

> "The SKL gave me a real insight into the best teaching approaches, as well as lots of resources to build engaging and well-structured lessons. I had the opportunity to practise my own skills by teaching in between the online sessions, which gave me confidence in delivering KS5 lessons.
>
> The course was well-structured and covered all aspects of AS level Pure Maths to a high standard. There was plenty of opportunity for independent practice too, and I felt supported and well guided by those delivering the sessions."
>
> **Eleanor Pittman**
> Subject Knowledge Live: AS Maths Pure Absolute Beginners participant

In 2024-25

843 Subject Knowledge Live course places were provided to teachers

Spotlight: Extended A level Mathematics Professional Development

Teaching Mechanics, *Teaching Statistics*, *Teaching Further Mathematics* and *Teaching Discrete Maths* are extended professional development courses for teachers wishing to develop their subject knowledge and teaching expertise in elements of A level Maths and Further Mathematics. Courses comprise online tutorials and face-to-face study days, along with support from a tutor and access to Integral, our online learning platform.

In 2024-25

49,200 hours of teacher CPD were provided by the AMSP

Spotlight:

"Through these courses, I've learned to link concepts to real data, and they have also opened my eyes to Desmos as a statistics tool.

My participation has benefited the department too, as I've always had the opportunity to feed back, and give practical demonstrations of what I've learned. In my experience, across all AMSP courses the content is great and the tutors are awesome! I've been teaching for 22 years now. I'd already been in the profession for 17 years by the time I took the first course, and I still got so much from it."

Rob Hopkin
Participant in Teaching Mechanics, Teaching Statistics, Teaching Further Mathematics and Teaching Discrete Maths

"I'm the course leader for GCSE Maths at Bilborough Sixth Form College in Nottingham, and I've just finished my thirtieth year of teaching. I only wish that I had discovered these courses earlier! I've learnt so much, gained confidence with teaching the topics covered, and really enjoyed the challenges of learning new things in my 50s.

Participation in the AMSP courses has given me new knowledge and insights into topics that I've never taught before. It's also given me practical ways of enhancing my teaching of these topics. Above all, it's given me the confidence to teach these new topics. I've already used several ideas from each of the courses in my teaching. The AMSP courses have simply been the best CPD I've ever done!"

Wendy Moore
Participant of Teaching Mechanics, Teaching Statistics and Teaching Further Mathematics

Further maths tuition and support for university entry

We provide support to help state school students progress to the next stage, ensuring they have access to A/AS level Further Mathematics, and developing their mathematical reasoning and higher-level problem-solving skills for university maths entrance tests.

We also provide tuition for A/AS level Further Mathematics, comprising 30 hours of small group tuition and extensive self-study resources. This is available for those students whose school or college can't offer it, and gives students the opportunity to access the qualification in circumstances that would otherwise mean they could not pursue it.

To support progress to maths degrees, we provide student study days and online tuition for STEP, MAT and TMUA admissions tests, which are used by Cambridge, Oxford, Durham, Imperial College and other universities.

In 2024-25, the AMSP organised 65 higher-level problem-solving study days for Year 11 and Year 12 students. Those attending the events were commonly planning to study maths, computer science, engineering, medicine or economics at university. Over 3,000 students came to the events, with almost two thirds of those attending coming from priority areas. 94% said they were better informed about progression to work and university study in STEM as a result of the events. In addition to the shorter events, over 2,000 students took part in longer courses (20+ hours) delivered over several weeks.

"The course I enrolled in was excellent! I really feel like I've gained a lot of insight into techniques that can be used not only for maths entrance exams like STEP and TMUA but also for other competitive exams like the maths section of PAT. Please keep hosting such sessions – they are immensely helpful!"

Participant
in AMSP higher level problem solving event

"The AMSP has given me an opportunity I would not have had otherwise."

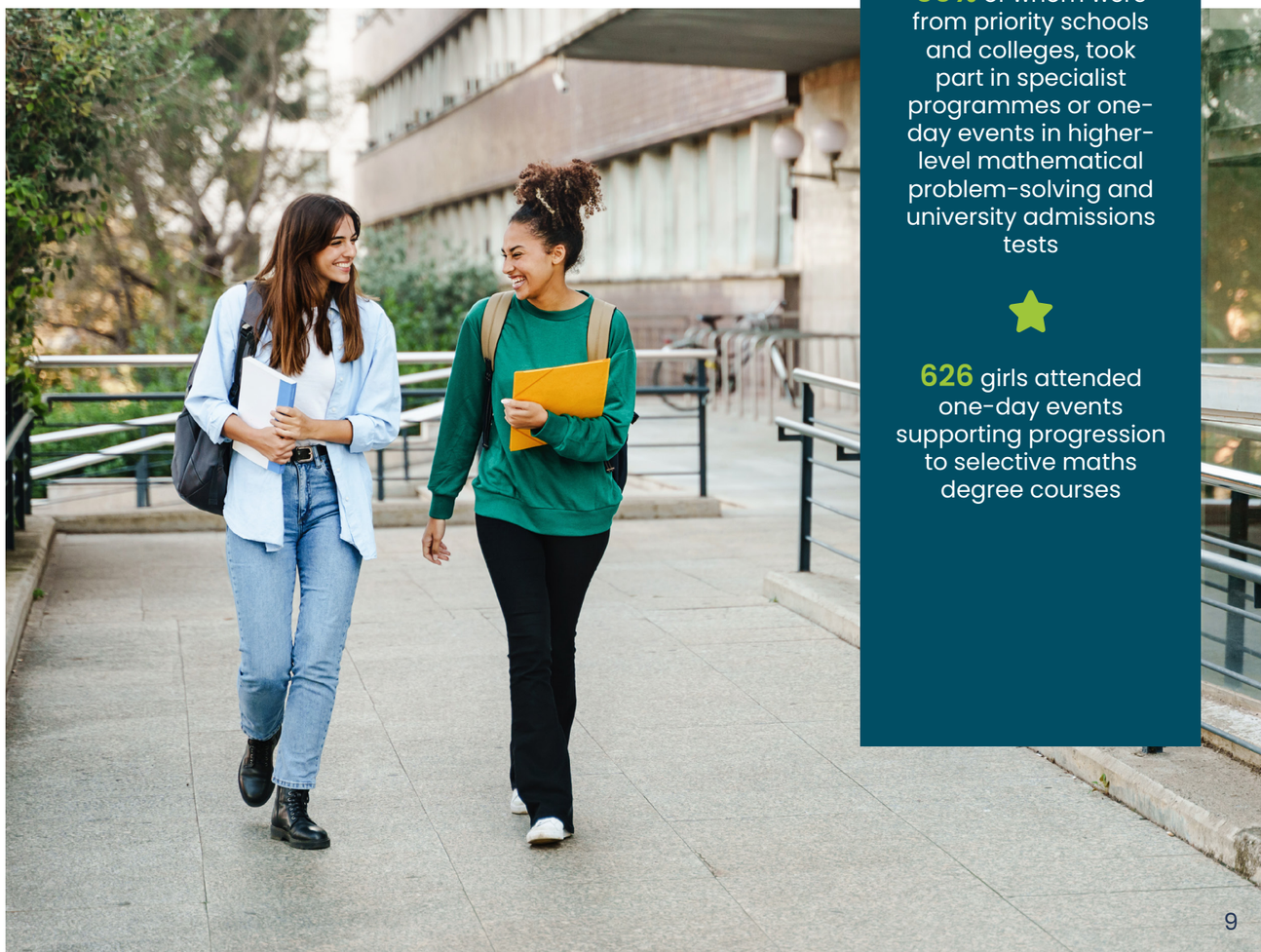
Jemma
AMSP Further Mathematics Tuition student

In 2024-25

166 students from **57** schools or colleges received a minimum of **30** hours of A level Further Mathematics Tuition

7,921 students, **50%** of whom were from priority schools and colleges, took part in specialist programmes or one-day events in higher-level mathematical problem-solving and university admissions tests

626 girls attended one-day events supporting progression to selective maths degree courses



The National Centre for Excellence in the Teaching of Mathematics (NCETM)

We are a key partner in the National Centre for Excellence in the Teaching of Mathematics. The NCETM is a DfE-funded programme which supports the ongoing professional development of all those who teach maths, particularly through the coordination of the Maths Hubs Programme, and with teaching for mastery as an underpinning principle of its work.

In 2024-25

The NCETM and Maths Hubs worked with over **61%** of schools in England

12,564 primary schools and **2,223** secondary schools were involved in the NCETM's Teaching for Mastery Programme

40 Maths Hubs serve all England's state-funded schools

There are over **1,900** local leaders of mathematics education (LLMEs) working across the Maths Hubs Network

The FE Maths CPD Programme

Our Further Education (FE) Maths CPD programme is an extensive professional development programme designed for teachers of students aged 16–19 years who are working towards achieving grade 4, Level 2 pass, or higher by resitting GCSE Maths or studying Functional Skills Maths.

The programme is funded by the DfE and delivered by a dedicated team of MEI's maths specialists who have experience in teaching and managing maths in Further Education settings. It includes CPD courses and national online events designed to bring together teachers and leaders in a widespread professional community.

The CPD Menu has proved particularly successful this year. It offers tailored group professional development, enabling maths departments to match CPD to their own priorities and needs. Content can be customised, and experienced members of MEI's FE team are available to provide face-to-face and online guidance.

"It's really nice to get some extra ideas and help [...] and actually be able to push myself a little bit further with my management skills."

Leader of maths team in FE college

"You can see that these activities can be slightly modified. What [MEI] want and are trying to do is actually apply it for us as well for our type of learners... It's great!"

Teacher of FE maths

In 2024-25

Over **500** FE teachers and practitioners accessed CPD

29,404 students potentially benefited from the programme

61 FE colleges were involved in the programme

The FE Maths Challenge

Our FE Maths Challenge is a competition for those students who didn't attain a grade 4+ in GCSE Maths at the end of KS4 and who continue to study towards the qualification after the age of 16. It invites students to take a step away from their usual revision and consolidation and get to know what there is to love about maths. In 2024-25, 92 FE colleges in England - 3 in every 5 - took part in the FE Maths Challenge.

The FE Maths Challenge is sponsored by AQA and goes from strength to strength each year.

Spotlight:

We took part in the FE Maths Challenge in 2024-25, and involved all 2,500 GCSE Maths resit students across both our first and second year learners.

Students really enjoyed the team-based nature of the competition, and particularly the interactive rounds using Kahoot and tarsia puzzles. They found the experience less formal than traditional assessments, which helped reduce anxiety and boosted their willingness to engage with maths in a new way. Ultimately, it builds a sense of achievement and belonging for learners who often feel overlooked in traditional academic contexts.

Katie Miller
Competition Lead and Quality Coach, Solihull College & University Centre

In 2024-25

96% of students said that, overall, the FE Maths Challenge is 'Good' or 'Excellent'

82% of students said that the FE Maths Challenge improved their confidence in maths

Spotlight:

"We took part in the FE Maths Challenge in 2024-25. Over 500 students took part in the first round which was fantastic! From this, 12 went on to represent us in the Regional Final, and each student achieved a top three place in their category.

The students really loved the competitiveness of the challenge and engaged enthusiastically with it. The Kahoot quizzes and tarsia puzzles were relevant to their learning, and they helped with an alternative approach to the revision of GCSE Maths topics."

Katie Bellamy
Teaching and Learning Manager – Maths, The Isle of Wight College

The Maths Progression Programme

The Maths Progression Programme (MPP) is one of four programmes supported by the Maths Excellence Fund (which is itself supported by XTX Markets and The Hg Foundation, and overseen by Purposeful Ventures). The Maths Excellence Fund helps students from disadvantaged backgrounds stay on a pathway to maths excellence. 2024-25 was the first year of the five-year MPP. Under the programme, we are working with nine secondary schools in Birmingham with high proportions of students from disadvantaged backgrounds to help students achieve their potential in maths. In each participating school, a Maths Progression Lead acts as a champion for maths progression and works with MEI to provide teacher professional development and student support.

In 2024-25

539 students from disadvantaged backgrounds benefitted from the Maths Progression Programme

"Professionally, being involved in the project has greatly enhanced my organisational and leadership skills. Personally, being an MPL has been incredibly rewarding. Engaging with the students on the project has allowed me to shape their perspective on a future in maths.

When it comes to what happens next, the students and I are just getting started! I hope to build an even larger community next year and to host more extensive MPP events within the school, further encouraging student participation. I'm excited to see how it will develop in the years to come."

Hannah Chander
Maths Progression Lead for the Maths Progression Programme and teacher of maths at Hamstead Hall Academy in Birmingham

Ritangle

Ritangle is a competition for students of A level Mathematics, the International Baccalaureate and Scottish Highers. It takes place between September and November every year, and asks teams of students registered by their school to answer a series of questions which are released weekly. It requires tough problem solving and teamwork. Every correct answer reveals a piece of information that helps solve the final task.

Spotlight:

"We have participated in Ritangle since 2018 and this year had 19 teams in the competition. In both 2023 and 2024, the winning team came from our school – as a state school, we are especially proud of our participation, and our students get so much out of it.

They therefore develop resilience and start to think about how to be more efficient, as well as getting the chance to explore interesting problems that are fun and appeal to their inquisitive nature.

I'd say to all other schools to go ahead and sign up! Just being exposed to the type of questions that are set will be enough to inspire your aspiring mathematicians and start them talking about maths."

Wendy Fung
Head of Academic Administration and teacher of maths at Queen Elizabeth's School in Barnet

"Ritangle was an invaluable experience, honing a myriad of skills including problem-solving, critical thinking, and teamwork."

Aryan
Winning team captain

In 2024-25

1,718 teams took part in Ritangle

"The competition was a great way to bring together the maths students in my college, particularly those who enjoyed problem solving. All in all, the competition was great and it was really fun to participate in."

Ritangle participant teacher, 2024

mA*ths and Further mA*ths Programmes

We work in partnership with Imperial College and the University of Manchester to deliver the mA*ths and Further mA*ths programmes. Supported by The Hg Foundation, these programmes are designed to develop the skills students need to achieve an A* in each A level qualification and build their confidence to apply and progress to university courses that look for an A* in Mathematics.

Year 12 and Year 13 students complete an online course covering the challenging elements of each curriculum. They attend online mentoring sessions and face-to-face masterclasses delivered by MEI.

We also provide on-demand online teacher professional development complementing the student course and programme, available to all teachers on the AMSP website.

"It's really inspiring for me. A levels are hard, and they're really exhausting, but it's really motivating to come [to the face-to-face masterclasses] and be like ... 'If I work hard, if I put energy into the course, this is what I could get out of it'."

Programme participant

In 2024-25

MEI delivered workshops to **400** A level Mathematics and **300** A level Further Mathematics students

Data Science Taught Course

The Data Science Taught Course is a series of 10 live online lessons for students of A level Mathematics and Core Maths. Lessons cover data science concepts and applications, and students explore coding tasks using Python, working with data taken from real contexts, including the environment, health, commerce, and world development. The course includes a practical assessment and short exam, with successful students receiving a certificate recognising their achievement.

> "This was a really informative course. I would definitely recommend it even to people who aren't interested in a career in data science to gain a basic understanding of how it works and why it matters."
>
> **Student from Leyton Sixth Form College, London**

> "The students found the course really engaging. They said it challenged them to think outside of the curriculum and they really enjoyed learning something new."
>
> **Participant teacher**

In 2024-25

800 students took part in the course

96% of teachers agreed or strongly agreed that, overall, their students enjoyed the course

95% of students agreed or strongly agreed that they enjoyed working on the Data Science Taught Course

Spotlight:

"I saw a post about the Data Science Taught Course on social media and thought it would suit our Maths and Computing students. I liked the fact that it could be done independently by the students during the evening, so didn't need to be supervised or hosted by the college.

The course gives students both knowledge of data science and something to show potential universities and employers. They enjoy its structured nature, as opposed to a self-study course, which can be difficult to stay motivated in. Some students use the DSTC as evidence of learning a new skill, which forms part of their Duke of Edinburgh award. We promote the idea of it being a great addition to their UCAS application, and have an awards ceremony where we present the certificates to recognise the effort and time commitment they have put in to completing the course."

Emily Rae
Teacher at Wyke Sixth Form College in Hull, East Yorkshire

> "This was a course I really enjoyed. I was able to develop my analysis skills overall and I can now analyse data professionally. Thank you so much for the opportunity!"
>
> **Student from Olchfa School, Swansea**

Integral

Integral is our virtual teaching and learning environment. It offers extensive high-quality resources to support the teaching and learning of maths – both in the classroom and online. For students, educators, or simply maths enthusiasts, Integral supports the learning, teaching and enjoyment of A level Mathematics in a dynamic, interactive and comprehensive way.

With 500 exam-style questions, 120 sections and 400 interactive resources, materials on Integral cover all the main A level Mathematics specifications, so teachers and students can be confident that what they need is covered. Both schools/colleges and students can take out their own subscription, and there are additional courses for trainee teachers, ITT providers, and universities.

In 2024-25

Over **55,000** students accessed Integral to support their A level learning

Nearly **15,000** teachers accessed Integral materials for use in their teaching

Big Earth Data Project

The Big Earth Data Project is a suite of free hands-on activities to engage and inspire students to look at current environmental challenges. It is funded by the UK Space Agency. The resources help students develop skills in exploring large Earth observation datasets while teaching them about the measurements satellites can take.

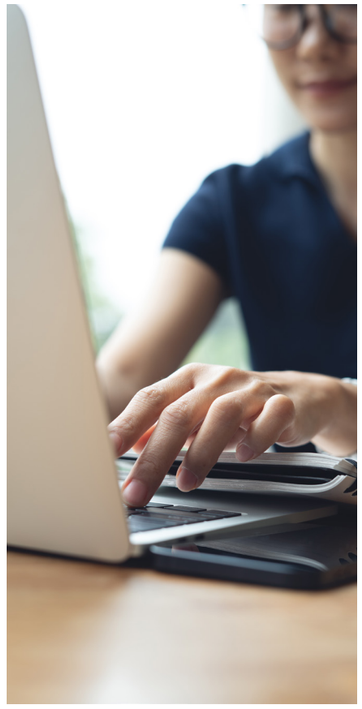
In 2024/25, we released three sets of resources, exploring the ozone layer, climate change and flooding.

In 2024-25

60 new secondary resources were created

"We all love using Integral, and we find it invaluable to our teaching and learning. Students use it a lot and praise it often."

"Integral offers fantastic resources that have changed our teaching this year for the better."



MEI Conference

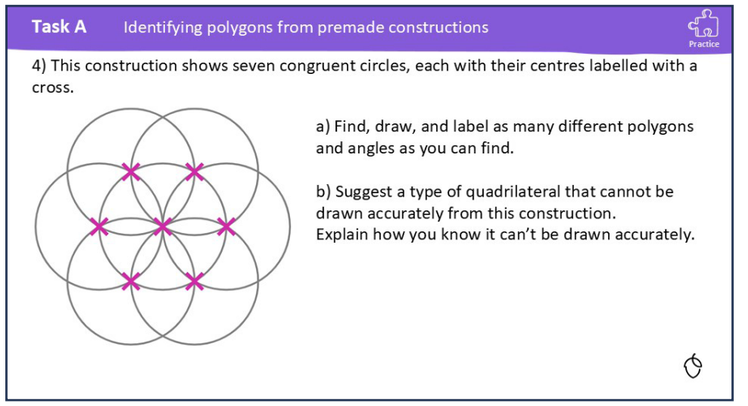
Every year, our annual conference brings together teachers and leaders of maths to inspire, collaborate and network. It reflects our philosophy that emphasising understanding and highlighting the connections within maths is the key to developing proficiency, confidence, and enjoyment in maths.

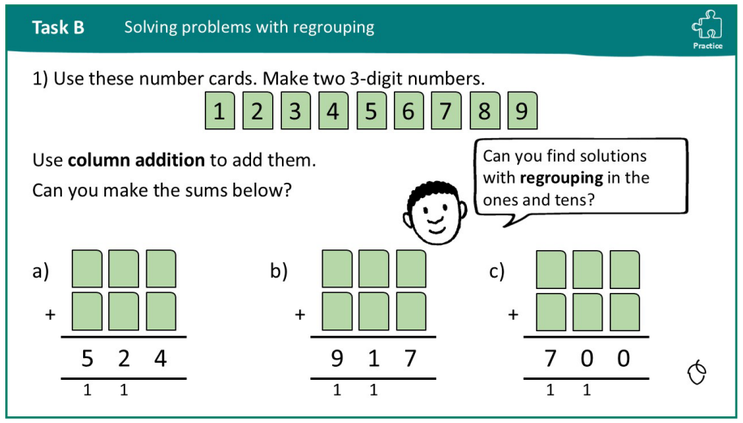
With 64 sessions held over two days, delegates at the conference in 2025 explored topics ranging from priorities for maths education to a keynote speech looking at a mathematical journey through literature.

In 2024-25

239 delegates attended the MEI Conference

98% rated their experience as good or excellent





Oak Maths Resources

We have worked with Oak National Academy to develop a full curriculum package for maths across Key Stages 1 to 4. Maths lesson materials comprise slide decks, videos, worksheets, quizzes and supplementary resources such as teacher notes. So far, over 180 units have been produced, offering over 2,000 primary and secondary lessons which are already proving extremely popular with teachers.

In addition to the suite of maths lessons, in 2024-25, we have created full resources for 30 primary and 16 secondary finance education lessons. The lessons cover topics from the purposes of money to budgets and ethical spending.

In 2024-25

774,188 lessons started by pupils

475,809 lessons downloaded by teachers

1,232 curriculum plans downloaded

1 in 10 of all those teaching maths in England are regularly visiting the Oak website

Find out more

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AMSP

NCETM

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Because maths matters!

Our partners and sponsors

We are grateful to our partners, funders and sponsors for enabling us to deliver this work and extend our reach and impact.

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