Levelling Up: Maths

Learned societies at the centre

Levelling Up: Maths is a sustained access and enrichment programme, created by the London Mathematical Society (LMS), for students from underrepresented backgrounds studying A-level Maths. The goal is to help these students achieve a place, and succeed, at university in preparation for a career in STEM.

The pilot for *Levelling Up: Maths* ended in 2022, and one year later the programme is being delivered by twenty universities across the UK. It is now a rich collaboration between the LMS, the <u>Institute for Mathematics and its Applications (IMA)</u>, the <u>Edinburgh Mathematical Society (EMS)</u> and universities.

In addition, the <u>Chartered Institute for IT (BCS)</u> also offers a variant of the programme, *Levelling Up: Maths for Computer Science (CS)*, recognising that A-level Maths can often be a significant barrier faced by students from underrepresented groups planning to study CS at university.

Sustained "near peer" tutoring

Levelling Up: Maths is a collection of twenty-six modules delivered by near peers (second or third year Maths undergraduates) to school students from underrepresented backgrounds. Typically, this involves an undergraduate from a local university, ideally of a similar background, delivering the programme either online and/or in-person to a tutorial group of five students. Usually, the modules are delivered after the school day, starting in April of Year 12 and concluding in May of Year 13.

The programme consists of intertwined academic enrichment and pastoral elements. Our goal is as much about increasing social (and mathematical) capital as it is about improving attainment.

In preparation for their career in STEM, our universities invite alumni of the programme to be part of a continuing support network. Moreover, even at this early stage, we anticipate that successful students will go on to be tutors themselves, making the programme more sustainable and putting the student journey at its heart.

Innovation and evaluation

Participating universities are charged with identifying both the tutors and the students to take part in the programme. Each university defines underrepresentation for their particular circumstance in line (in England) with their Access and Participation Plan (APP) and (typically) their Maths departments are responsible for the delivery of the programme. In addition to inspiring, and improving the confidence of, the school students, *Levelling Up: Maths* also provides a valuable professional development opportunity for the undergraduate tutors.

Working together, the IMA and the LMS help new universities to understand how to deliver the programme. They also carefully monitor the academic material providing updates as necessary ensuring the programme remains of high quality. Finally, since the inception of *Levelling Up: Maths*, we have had a clear focus on innovation and evaluation. In this regard, the LMS & IMA will be jointly issuing an Evaluation Framework to all *Levelling Up: Maths* universities in Autumn 2023.