

CORE MATHS BRIEFINGS

from the School of Education
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03

This briefing series presents findings from a research project following the first few years of Core Maths, as experienced by students, teachers and senior leaders.

Each briefing is accompanied by a short film.

Briefing 03 focuses on students' experiences of Core Maths, their views about what it is like to study this new course, and the benefits they believe it has given them.

BRIEFING 3:

Studying Core Maths: 'No Downsides'

Video resource 3:

No Downsides

Video production by www.getvideo.co.uk

Briefings written by

Rachel Mathieson and Matt Homer
Centre for Curriculum, Pedagogy and Policy
School of Education, University of Leeds

Full project report at:

<https://coremathsproject.leeds.ac.uk/>

What do Students Say about Studying Core Maths?

"Everyone should do this. It's really relevant."

"It's the maths that affects YOU"

"It's easily manageable"

"I enjoy it a lot more than the maths that's all on paper"

"It's actually fun"

Students report that Core Maths feels different from GCSE: they view it as more relatable. In fact, students who might have struggled with GCSE Maths often find that Core Maths encourages them to develop a renewed confidence and interest in maths.



Students recognise that Core Maths develops critical thinking, which helps with thinking about how data are used to create an argument in the media, for example, or in advertising.

Students say that, even when they take Core Maths as an extra qualification, it is not too time consuming, and it is worth the extra work because of the benefits the course brings (see page 3).



Students tell us that Core Maths is not just about maths! It's about understanding a problem, taking what you already know and putting it into context, comparing data, coming up with solutions, thinking outside the box.

Students who cannot access, or do not want to take, A-level Mathematics are pleased that Core Maths offers them the chance to continue studying maths after GCSE.



Students taking Core Maths with other quantitative subjects tell us they feel it has been helpful to practise the mathematical elements of those courses within Core Maths lessons. Students taking unrelated subjects are pleased to have maintained a broad study programme which includes maths.

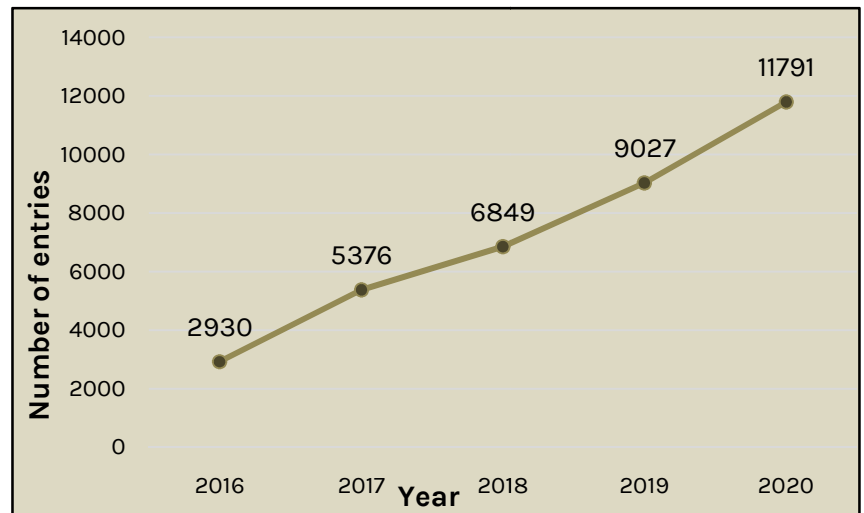
Students have suggested that maths with the relevance and application of the kind offered within Core Maths be made available in a corresponding pre-16 qualification at Level 2.



What are the Benefits to Students of Taking Core Maths?

As we can see from the chart on the right, numbers of Core Maths students have been growing steadily since it was first examined in 2016.

Students tell us that they see a variety of benefits from taking the course.



- Core Maths can assist with the maths needed in other courses, such as Psychology, Geography, Business Studies and science courses
- Core Maths is good preparation for employment and apprenticeships. It involves utilising mathematical concepts and skills in realistic contexts, using, manipulating and interpreting data, and using spreadsheets, for example, both of which are becoming more and more widespread across many job sectors
- Having the Core Maths qualification shows that a student has kept up with maths through their sixth form studies, which is preferable to having a long gap after GCSE, during which maths skills can deteriorate or disappear
- Core Maths helps students develop into independent mathematical thinkers with a problem-solving approach to learning. The real-world, applied nature of Core Maths, especially the personal finance topics, teaches students about tax, loans, budgeting, interest rates and mortgages; it helps students develop into citizens who can exercise critical awareness around statistics in the media and other public arenas, and view the world with a critical eye

Some universities are now making lower offers to students who have a good Core Maths grade. Higher Education admissions staff tell us they recognise the value of the problem solving and critical thinking skills students develop through Core Maths, which give students confidence and prepare them well for undergraduate study. See <https://amsp.org.uk/universities/alternative-admissions-offers-level-3-maths>

Background

These findings are based on evidence from a three-year (2017-2020) research project, which used a mixed-methods approach, including national data (2016-2019), a set of thirteen case study institutions (2017-2019), and an online survey (2019), to investigate the successes and challenges experienced by this new addition to the post-16 landscape over its first few years of existence.

Participation in post-16 mathematics is known to be much lower in England than in other developed countries, despite recognition that mathematical skills and confidence are important for study, life, work and society. Core Maths qualifications were first taught in 2014, and first examined in 2016, as a contribution towards achieving the UK government's policy objective of substantially increasing post-16 mathematics participation at Level 3 in England.

Project details

Title: The early take-up of Core Maths: Successes and Challenges

Funder: Nuffield Foundation

Research team: Matt Homer, Rachel Mathieson, Indira Banner, Innocent Tasara

Project website:
<https://coremathsproject.leeds.ac.uk>

Partnerships

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Contact Details

Principal Investigator:
Dr. Matt Homer, Associate Professor
Centre for Curriculum, Pedagogy and Policy,
School of Education, University of Leeds
m.s.homer@leeds.ac.uk