

CORE MATHS BRIEFINGS

from the School of Education
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01

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.

In Briefing 01, we highlight the mainly positive response to this new qualification from teachers and students who have taught and studied it.

BRIEFING 1:

Offering, Teaching and Studying Core Maths

Video resource 1:

Offering, Teaching and Studying Core Maths

Video production by www.getvideo.co.uk

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Full project report at:

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

A Positive Reception for Core Maths



Teachers, students and senior leaders welcome the approach to mathematics taken by Core Maths

The approach of Core Maths is potentially transformative for society, and for changing the way we think about and use mathematics, in school and in life.



The availability of a post-16 mathematics course other than A-level is welcomed by many

Around 250,000 students every year currently do not study mathematics beyond the age of 16. Where it is offered, Core Maths now gives students the opportunity to continue with mathematics.



Core Maths is perceived by teachers and students as relevant and accessible

The focus on problem solving and critical thinking, which Core Maths embraces, is popular and successful.



Teachers and students enjoy teaching and studying Core Maths

Institutions where Core Maths is now fairly well established find that the course sells itself: students and teachers are enthusiastic about it, and so word spreads about its benefits.



There is flexibility in how to structure the course to suit each institution

Although Core Maths was designed as a two-year course, many schools and colleges have found that offering a one-year course works better for them.

Reasons to Offer and to Study Core Maths

Teacher comments

The student feedback has been brilliant

It's the most rewarding course I've ever taught

I would make it compulsory if I could

It provided our students with an opportunity to continue maths, and maintain that subject within their profile, which we felt was a really strong thing to do

...for its own sake

Students find Core Maths valuable and enjoyable in its own right. Teachers love the course and say it is a refreshing way to approach mathematics. It teaches problem solving, critical thinking and decision making, skills which are valuable in any area of life.

...as a supporting or facilitating course, it is perceived to benefit outcomes in other subjects

Senior leaders believe that students who take Core Maths benefit from being able to develop, through Core Maths, the mathematical, quantitative and critical thinking skills needed in other subjects.

...it can also be a welcome complement to the rest of a student's programme

Students taking subjects which may not seem to have any links with mathematics also benefit from keeping mathematics in their portfolio, showing that they have followed a broad spectrum of curriculum options.

...it enables students to continue with mathematics between GCSE and whatever post-18 destination they move to

Instead of having a gap between GCSEs and moving on to Higher Education, apprenticeship or work, students who take Core Maths are working with mathematics regularly.

...an institution can benefit from offering the course to its students as an added extra, going above and beyond the usual three A-level or equivalent study programme

Teachers and senior leaders tell us that including Core Maths in their curriculum offer has led to better assessment outcomes and better value-added scores across the cohort. As more universities recognise the benefits of Core Maths, more post-16 providers will see the benefits of offering Core Maths as an additional course.

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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