

Supporting maths learning through peer support: a randomised control trial

Submission date 18/11/2025	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
Registration date 04/12/2025	Overall study status Ongoing	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 02/12/2025	Condition category Other	<input type="checkbox"/> Individual participant data <input checked="" type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

Many secondary school pupils in England, especially those from disadvantaged backgrounds, struggle to do well in mathematics. These difficulties can affect their confidence, future education, and job opportunities. The PeertoPeer Coaching study aims to find out whether a schoolbased maths coaching programme can help improve pupils' maths performance, confidence, and learning skills.

The programme, developed by the education charity CoachBright, trains highachieving older pupils to coach younger pupils who find maths more difficult. The study will test how well this approach works for improving maths outcomes. Researchers will also explore how the programme is delivered in practice and what helps or hinders its success in schools. The study is funded by the Education Endowment Foundation (EEF).

Who can participate?

The study will include pupils aged 11–12years (Year7) and 14–15years (Year10) from statefunded secondary schools in England.

Year7 pupils taking part will be those who scored below 100 in their maths Key Stage2 tests and may be eligible for Free School Meals or meet other disadvantage criteria.

Year10 pupils who are doing well in maths (expected GCSE grades7–9) will act as coaches.

What does the study involve?

Around 100 schools will take part. Schools will be randomly selected to join either the treatment group (who run the PeertoPeer Coaching programme) or the control group (who continue their usual maths teaching).

In the treatment schools:

Year10 coaches receive training from CoachBright on effective coaching, communication, and how to support metacognitive (learningaboutlearning) strategies.

Each Year10 coach is matched with a Year7 coachee. They meet once a week for about an hour over 10weeks to work together on maths problems and discuss strategies for learning.

Sessions are held in school time with support from teachers and CoachBright programme managers.

At the end, coaches take part in a graduation event and can earn an SSAT leadership qualification.

In control schools, pupils continue with business as usual lessons.
All participating pupils will complete short online or paper-based tests before and after the programme.
Maths progress will be measured using the Progress Test in Maths (PtM).
Confidence and learning skills will be measured using short questionnaires on maths self-efficacy and metacognition.
Researchers will also gather feedback through surveys, interviews, and focus groups to understand how the programme works in practice.

What are the possible benefits and risks of participating?
Taking part may help younger pupils improve their maths skills, confidence, and enjoyment of learning. Older pupils may develop leadership and communication skills that support their own learning and future education. Schools may gain a structured way to support disadvantaged pupils and strengthen peer relationships.
There are no known risks from taking part. All activities take place during school time with teacher supervision. No personal or health data beyond school information will be collected. Participation is voluntary, and pupils can withdraw at any time.

Where is the study run from?
The evaluation is done by RANDEurope and the University of Leeds. The Peer-to-Peer Coaching programme is delivered by CoachBright, a UK charity.

When is the study starting and how long is it expected to run for?
The main study is running during the 2025–2026 school year. The programme will be delivered in two cohorts:
Cohort 1: October 2025–February 2026
Cohort 2: February–June 2026
In the following school year, 2026–2027, EEF will be supporting CoachBright to pilot a new school-led model of their programme to assess evidence of promise, feasibility and readiness for scale.
The evaluation report will be published in Summer 2028.

Who is funding the study?
Education Endowment Foundation (UK)

Who is the main contact?
Ms Elena Rosa Speciani, erspeciani@randeurope.org

Contact information

Type(s)
Public, Scientific, Principal investigator

Contact name
Ms Elena Rosa Speciani

ORCID ID
<https://orcid.org/0000-0003-4420-3320>

Contact details

RAND Europe
Eastbrook
Shaftesbury Road
Cambridge
United Kingdom
CB2 8BF
+44 (0)1223 353 329
erspeciani@randeurope.org

Type(s)

Public, Scientific

Contact name

Dr Rebecca Mead

ORCID ID

<https://orcid.org/0000-0003-2849-0307>

Contact details

RAND Europe
Eastbrook House
Shaftesbury Road
Cambridge
United Kingdom
CB2 8BF
+44 (0)1223 353 329
rmead@randeurope.org

Type(s)

Public, Scientific

Contact name

Dr James Merewood

Contact details

RAND Europe
Eastbrook House
Shaftesbury Road
Cambridge
United Kingdom
CB2 8BF
+44 (0)1223 353 329
merewood@randeurope.org

Additional identifiers

Protocol serial number

N/A

Study information

Scientific Title

Using peer-to-peer coaching to improve maths attainment: a two-armed cluster randomised trial

Acronym

P2P

Study objectives

The Education Endowment Foundation (EEF) is funding a research study evaluating Peer-to-Peer Coaching, an intervention designed to improve maths attainment.

Delivered by the social mobility charity Coachbright, Peer-to-Peer Coaching involves high-achieving Year 10 pupils tutoring Y7 pupils in 10 weekly 60-minute-long sessions. The sessions are supported by CoachBright Programme Managers, who provide training, resource guidance, and supervision alongside an in-school coordinator. Programme Managers also debrief with Y10 coaches and support them to develop resources for the next session. Both coaches and coaches keep reflective journals throughout, and coaches can also receive a UCAS-recognised Schools, Students and Teachers (SSAT) leadership accreditation.

The aim of this trial is to measure the impact of the Peer-to-Peer Coaching programme on mathematics attainment, self-efficacy in maths, and metacognition (self-awareness and reflective ability of pupils). This is complemented by an embedded process evaluation which will explore implementation fidelity, barriers and facilitators, and pupil responsiveness.

Ethics approval required

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Ethics approval(s)

approved 24/03/2025, RAND Europe Research Ethics Committee (RE-REC) (RAND Europe, Eastbrook House, Shaftesbury Road, Cambridge, CB2 8BF, United Kingdom; +44 (0)1223 353 329; researchethics@randeurope.org), ref: 022807.022

Study design

Two-armed cluster randomized trial

Primary study design

Interventional

Study type(s)

Efficacy

Health condition(s) or problem(s) studied

Low attainment in maths among secondary-school disadvantaged pupils

Interventions

Peer-to-Peer Coaching. A schoolbased mathematics coaching programme delivered over ten weeks to treatment schools, which are randomly allocated at the school level with stratification by region and school type.

The key components of PeertoPeer Coaching are:

1. Training for highattaining Year10 pupils to coach lowerattaining Year7 pupils in mathematics.
2. Weekly 50 to60minute onetoone coaching sessions over ten weeks focusing on metacognitive

strategies, tailored maths problems, and mutual concept explanation.

3. Ongoing support for coaches through debrief sessions and an SSAT leadership accreditation, culminating in a graduation event.

Control schools continue with business as usual.

Intervention Type

Other

Primary outcome(s)

Maths attainment is measured using the Digital Progress Test in Maths (PtM), which is age standardised (GL Progress Test in Maths (PtM) – Level 12 for Year 7; Level 15 for Year 10). It is measured in an endline survey which is in January-February 2026 for cohort 1 and May-June 2026 for cohort 2. The baseline data collection in September/October 2025 used KS2 Maths scores from the National Pupil Database, which is used as the primary baseline measure for maths attainment.

Key secondary outcome(s)

1. Maths self-efficacy is measured using the Sources of Mathematics Self-Efficacy Scale (SMSES)

2. Metacognition is measured using the Junior metacognitive awareness inventory

This will be administered by University of Leeds to Year 7 and Year 10 pupils at the end of the intervention (Cohort 1 February/March 2026, Cohort 2 May/June 2025)

Completion date

31/01/2028

Eligibility

Key inclusion criteria

1. Coachees: Year 7 pupils with low attainment in maths (determined through their SATs results - SATs score <100)

2. Coaches: Year 10 pupils with high attainment in maths (potential to achieve GCSE scores of 7-9 in maths, determined through one or a combination of end-of-year exams, teacher assessments, or any standardised tests taken in Year 9)

3. At least 80% (12 out of 15) of Year 7 pupils should be eligible for Free School Meals (FSM). Any other pupils identified as potentially benefitting from the Peer-to-Peer coaching programme should meet one or more of the criteria for CoachBright's wider definition of disadvantaged (below)

4. At least 50% (8 out of 15) of the Year 10 pupils should be eligible for FSM or should meet wider disadvantage criteria but their maths attainment should take precedence

Participant type(s)

Learner/student

Healthy volunteers allowed

Yes

Age group

Child

Lower age limit

11 years

Upper age limit

15 years

Sex

All

Total final enrolment

2700

Key exclusion criteria

Schools will not be eligible to apply if:

1. They are a private school or special school
2. They will be participating in another mathematics-focused EEF trial for the same year groups in 2025-26 such as Action Tutoring, Fluent and Flexible Calculators or Specialist Knowledge for Teaching Mathematics
3. They are currently delivering a CoachBright Peer-to-Peer coaching programme

Date of first enrolment

07/03/2025

Date of final enrolment

17/10/2025

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

Schools in England

RAND Europe
Eastbrook House
Shaftesbury Road
Cambridge
England
CB2 8BF

Sponsor information

Organisation

Education Endowment Foundation

ROR

<https://ror.org/03bhd6288>

Funder(s)

Funder type

Not defined

Funder Name

Education Endowment Foundation

Alternative Name(s)

EducEndowFoundn, Education Endowment Foundation | London, EEF

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

All individually identifiable data held by RAND Europe will be destroyed 1 year after the end of the evaluation study (2027). All individually identifiable data held by the University of Leeds will be destroyed 5 years after the end of the evaluation study (2031). All pupil records held by CoachBright held on their central database will be deleted or anonymised 10 years after pupils graduate from the CoachBright programme. Data in the EEF's archive in the ONS SRS will include data only individually identifiable to the Department for Education (DfE), the government department responsible for children's services and education, and will be kept indefinitely for the purposes of future research.

Audio recordings of focus groups and interviews will be destroyed following transcription (approximately 3 months after recording). Anonymous transcripts from the focus groups will be kept indefinitely by the University of Leeds for future teaching and research purposes.

Data from the evaluation will be publicly available for research purposes through the EEF data archive: <https://eef.dev/projects-and-evaluation/evaluation/evaluation-guidance-and-resources/evaluation-data-archive>

IPD sharing plan summary

Stored in publicly available repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Other files			02/12/2025	No	No
Protocol file		19/09/2025	02/12/2025	No	No