

Can the Same Day Intervention improve maths attainment in Year 5 students in England?

Submission date 29/04/2019	Recruitment status No longer recruiting	☐ Prospectively registered ☒ Protocol
Registration date 29/04/2019	Overall study status Completed	☒ Statistical analysis plan ☒ Results
Last Edited 10/08/2022	Condition category Other	☐ Individual participant data

Plain English summary of protocol

Background and study aims

This study evaluates the effectiveness of a primary school maths programme called the Same Day Intervention (SDI). Teachers are trained to adapt their classroom approach to maths teaching, for example using frequent modelling and an 'I do, you do' approach in class teaching. This involves the teacher demonstrating how they go about solving the problem, then the students practise by copying the teacher's approach. The aim of the study is to explore whether the intervention has an effect on key outcomes of interest. The primary outcome will be maths attainment as measured by a maths test at the end of Year 5. The secondary outcomes will include a measure of teacher workload, as we might expect to see a reduction in this due to marking being completed rapidly during the school day.

Who can participate?

Year 5 Teachers and their students in schools in the North of England will be included in the trial.

What does the study involve?

Schools will be randomly allocated to one of two groups. In the intervention group, Year 5 teachers will be trained in the SDI maths teaching technique and will use it in all Year 5 maths classes for the duration of the school year. In the control group, teachers will continue to teach maths as before. At the end of the school year, students will be asked to take a maths test, and we will compare levels of maths attainment for the treatment and the control students. We will also ask teachers about their workload and their perception of their students' confidence in maths, and compare results in treatment and control schools..

What are the possible benefits and risks of participating?

SDI is designed to help maths learning and prevent students from falling behind in their understanding. There are no potential risks.

Where is the study run from?

National Centre for Social Research (NatCen) (UK)

When is the study starting and how long is it expected to run for?

The study started in 2018 and will finish in 2020.

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

Who is the main contact?
Daniel Phillips, Daniel.phillips@natcen.ac.uk

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
P12509

Study information

Scientific Title
Same Day Intervention – the effects of introducing new maths pedagogy on Year 5 students' maths attainment, teacher workload and teachers' perceptions of students' confidence in maths'

Acronym
SDI

Study objectives
Primary research question:
What is the impact of SDI on maths attainment of Year 5 pupils in England and how does it differ by FSM eligibility?

Secondary research questions:
To what extent does participation in SDI affect teachers' workload?
To what extent does participation in SDI affect teacher perception regarding students' confidence in maths?

Additional analysis:
What is the impact of SDI on the size of the gap between higher-achieving and lower-achieving Year 5 pupils?

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 18/01/2018, National Centre for Social Research (NatCen) Research Ethics Committee (35 Northampton Square, London EC1V 0AX; 0207 250 1866; info@natcen.ac.uk), ref: N/A

Primary study design

Interventional

Study design

Two-arm cluster randomised controlled efficacy trial with random allocation at school level

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Year 5 pupils learning maths

Interventions

The study is a two-arm cluster (school-level) randomised controlled trial, with schools randomly assigned to intervention (Same Day Intervention [SDI]) or control (business-as-usual maths classes).

Teachers in intervention schools receive training and access to resources and support and, where possible, teaching assistants will be trained to support. In addition, the Senior Leadership Team will create the structural change to the school day as needed. Teachers demonstrate a topic, before pupils are given five or six diagnostic questions to complete independently. There is then approximately 15 minutes 'pit stop', during which teachers mark pupils' work, and pupils either attend a short assembly or are led in an activity by a teaching assistant. After the break, pupils are grouped according to their diagnostic activity performance and there is an intervention session designed to target pupils who need extra teaching, address common misconceptions and embed learning. All regular maths classes will be replaced with SDI maths classes. The total number of classes per week may vary slightly by school. The intervention started in late October 2018 and finishes in early June 2019.

Students in control groups will receive maths classes as usual.

Intervention Type

Behavioural

Primary outcome(s)

Year 5 student Maths attainment, as measured by GL's Progress Test in Maths, which will be taken in June-July 2019 (i.e. at the end of the intervention)

Key secondary outcome(s)

1. Teacher workload (teacher time spent marking maths work)
2. Teacher's perceptions of student self-confidence in maths

These measures are being collected using a bespoke teacher survey in June-July 2019.

Completion date

30/03/2020

Eligibility

Key inclusion criteria

School:

1. Based in Yorkshire and Humber and surrounding areas
2. School has at least one class of Year 5 students. Mixed year-group classes are not eligible.
3. Has not been involved in any SDI projects previously, though it could have employed other Shanghai methodologies or been involved in a Maths Hub project
4. Mainstream non-selective and non-special school

All students in Year 5 classes of schools that met the criteria above were eligible.

Participant type(s)

Mixed

Healthy volunteers allowed

No

Age group

Child

Sex

All

Total final enrolment

3298

Key exclusion criteria

School does not meet inclusion criteria

Date of first enrolment

01/01/2018

Date of final enrolment

31/05/2018

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

Natcen Social Research

35 Northampton Square

London
United Kingdom
EC1V 0AX

Sponsor information

Organisation

Education Endowment Foundation

ROR

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

Funder(s)

Funder type

Charity

Funder Name

Education Endowment Foundation

Alternative Name(s)

EducEndowFoundn, The Education Endowment Foundation (EEF), 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

The datasets generated during and/or analysed during the current study will be stored in a non-publicly available repository. The data from the evaluation will be archived by the Education Endowment Foundation (EEF) and will only be accessible via the ONS Secure Research Services.

IPD sharing plan summary

Stored in repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Funder report results	results (updated version)	01/11/2020	01/04/2021	No	No
Funder report results		01/11/2020	28/06/2021	No	No
Protocol file		15/04/2019	10/08/2022	No	No
Statistical Analysis Plan		22/05/2019	10/08/2022	No	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes