

Investigating the impact of the '1stClass@Number 1' intervention on maths attainment for Year 2 pupils

Submission date 22/08/2023	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 30/08/2023	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 12/08/2025	Condition category Other	<input type="checkbox"/> Individual participant data

Plain English summary of protocol

Background and study aims

1stClass@Number 1 is a mathematical intervention developed by Every Child Counts, run on a not-for-profit basis by Edge Hill University and set up with support from the Department for Education in 2018. It is a light touch intervention for children who need further support at the level of the Year 1 curriculum and is delivered by trained teaching assistants to small groups of four pupils. A previous evaluation of 1stClass@Number 1 indicated possible improvement in maths results, although there was some evidence of a lesser benefit for pupils eligible for free school meals. The current evaluation will therefore emphasise measuring the impact of the intervention for free school meal (FSM)-eligible pupils. The aim of this study is to investigate the impact of participation in 1stClass@Number 1 on maths attainment for Year 2 pupils, particularly those eligible for FSM.

Who can participate?

Infant or primary schools with Year 2 pupils can participate, as long as they haven't recently participated in 1stClass@Number 1 or are currently engaged in maths interventions similar to 1stClass@Number 1.

Year 2 pupils attending a participating school may themselves participate, if they are shortlisted by their teacher as suitable for the intervention. Suitability is decided based on a range of factors, in particular, whether pupils are behind age-related expectations in their maths ability. The final selection of 8 pupils for the trial will be based on their scores in the SENT-R screening test and pupils' FSM-eligibility status.

What does the study involve?

About 235 primary schools will be recruited to the trial. At each participating school 8 pupils will be selected for randomisation. Selection is based first on being shortlisted as suitable for the intervention by the class teacher followed by a low score (<40) on a maths screening test (see study protocol for details of this process). The 8 pupils selected will be randomised evenly within the school so that 4 are assigned to the control and 4 to the intervention (1stClass@Number 1). Intervention pupils receive 30 half-hour numeracy sessions over 15 weeks, in addition to usual maths teaching. The sessions are delivered by teaching assistants, who are being trained in the

1stClass@Number 1 programme over the same 15-week period. Control pupils continue to be taught as usual and will only be eligible to receive 1stClass@Number 1 after the trial ends. Due to the recruitment needs of the trial, the intervention will be delivered in two cohorts, with cohort 1 schools delivering the intervention to pupils starting in the 2023/24 autumn term and cohort 2 starting in the spring term. At the beginning and end of their 15-week intervention period, pupils will sit a maths test. The effectiveness of 1stClass@Number 1 will be measured by how much intervention pupils have improved their maths score, compared to control pupils.

What are the possible benefits and risks of participating?

The potential benefit to pupils taking part in 1stClass@Number 1 is an improved understanding of maths and consequently improved exam attainment. No risks of participating are anticipated.

Where is the study run from?

The study is being run by the National Foundation for Educational Research (NFER) in England. Training of teaching assistants will take place at a specified location for each training region. Delivery of 1stClass@Number 1 by teaching assistants occurs at schools taking part in the trial. Data on pupil participation in 1stClass@Number 1 will be collected by schools and returned to NFER.

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

November 2022 to July 2025

Who is funding the study?

Education Endowment Foundation (UK)

Who is the main contact?

Aarti Sahasranaman, a.sahasranaman@nfer.ac.uk

Study website

<https://educationendowmentfoundation.org.uk/projects-and-evaluation/projects/1stclass-number1-2022-23-trial>

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Additional identifiers

EudraCT/CTIS number

Nil known

IRAS number

ClinicalTrials.gov number

Nil known

Secondary identifying numbers

Nil known

Study information

Scientific Title

Randomised controlled effectiveness trial investigating the effect of participation in the '1stClass@Number 1' targeted intervention on maths attainment amongst Year 2 pupils

Study objectives

There is a difference in maths attainment measured by the Quantitative Reasoning Test for pupils receiving the 1stClass@Number 1 intervention in comparison to control pupils who do not receive the intervention. There is a focus on the difference amongst pupils eligible for free school meals in this trial.

Ethics approval required

Ethics approval not required

Ethics approval(s)

There was no formal ethical approval for this trial. However, the evaluation will be conducted in accordance with NFER's Code of Practice, available at NFER Code of Practice. Each participating school's headteacher will provide their agreement to participate in the trial by signing the Memorandum of Understanding (MoU) that outlines the responsibilities of all parties involved in the trial. NFER will share a parent letter and withdrawal form with schools to be sent to parents /carers of all pupils that schools intend to nominate for screening. Through the withdrawal form, parents/carers will have the opportunity to withdraw their child from the evaluation and associated data processing at any stage of the trial.

Study design

Interventional two-arm randomized controlled effectiveness trial, unblinded and with the intervention assigned at pupil level

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

School

Study type(s)

Other

Participant information sheet

<https://www.nfer.ac.uk/for-schools/participate-in-research/effectiveness-trial-of-first-class-number-one/>

Health condition(s) or problem(s) studied

Maths attainment amongst 6- and 7-year-old pupils that are experiencing moderate difficulties with the subject

Interventions

The initial shortlist of suitable pupils nominated by teachers at each school will first need to be reduced to exactly 8 pupils to be randomised per school, so that the intervention can be delivered as intended to groups of 4 pupils. This selection of the final 8 pupils will be done by administering the Sandwell Early Numeracy Test – Revised (SENT-R). Pupils with scores of 40 or

below were prioritised for selection, although the full selection procedure also prioritised pupils eligible for free school meals (FSM; see protocol for description).

Randomisation will then be carried out by an NFER Statistician using R code, in a 1:1 ratio of control to intervention. Randomisation will be stratified by school and FSM eligibility. The code will be stored for reproducibility and transparency and will be included as an appendix in the statistical analysis plan and final report. The statistician will not be blinded to group allocation. Randomisation allocation data will then be passed to NFER's Research and Product Operations team, who will liaise with schools.

At all participating schools teaching assistants complete six half-day sessions of professional development delivered by Every Child Counts trainers accredited by Edge Hill University and taking place every 2-4 weeks. These training sessions run alongside the intervention so that teaching assistants are trained in the intervention topic by topic. Training sessions for the teaching assistants focus on how the intervention works, how to deliver it to pupils struggling with maths and developing TAs' own understanding of maths.

1stClass@ Number 1 is designed to be delivered to small groups of four children. The intervention consists of 30 half-hour lessons, normally delivered (by teaching assistants, trained as described above) 3 times a week for 10 weeks, during normal school hours in addition to regular mathematics instruction. This means that pupils involved in the intervention spend approximately 15 additional hours on numeracy. (Note, the training days are interspersed between topics, meaning the full-time period of the whole intervention (training plus delivery) is approximately 15 weeks).

Control pupils continue to be taught as usual and will only be eligible to receive 1stClass@Number 1 after the trial ends.

Intervention Type

Other

Primary outcome measure

Quantitative Reasoning Test score, 0-20 continuous scale, obtained from tests administered at schools by NFER test administrators. This is measured before (i.e. the baseline or pretest measure) and after 15 weeks of pupil participation in the intervention.

Secondary outcome measures

There are no secondary outcome measures

Overall study start date

01/11/2022

Completion date

31/07/2024

Eligibility

Key inclusion criteria

School inclusion criteria:

1. Infant or primary schools with children in Year 2, as of 1st September 2023
2. Located in one of the English regions where training will take place: North East, East Sussex,

West Sussex, Cambridgeshire, Dorset, Derby, Northamptonshire, Liverpool, Birmingham, North and South Manchester, Lancashire, Rotherham

3. Able to nominate a TA and a Link teacher who is able to access face-to-face training in one of the 16 training venues

4. Willing to pay the subsidised training cost of £200 (usual cost is £1,100)

Pupil inclusion criteria:

1. Attendance at a school that meets the above criteria

2. Completing Year 2 during the 2023/2024 academic year

3. Selected by class teacher as appropriate for the intervention. A number of factors influence selection, in particular that pupils should be achieving at around 12 months behind age-related expectations towards the end of Year 1.

This trial has a focus on the impact of 1stClass@Number 1 on disadvantaged pupils, especially those in receipt of Free School Meals (FSM). Schools with a high number of FSM pupils were targeted, and pupils eligible for FSM were more likely to be selected (though neither was used as a definitive selection criterion).

Participant type(s)

Learner/student

Age group

Child

Lower age limit

6 Years

Upper age limit

7 Years

Sex

Both

Target number of participants

1,688

Key exclusion criteria

School exclusion criteria:

1. Taking part in the following EEF-funded programmes in the academic years 2023-24: ARK

Mathematics Mastery or

Mathematical Reasoning

2. Has a TA currently working in the school who has already completed any 1stClass@Number 1 training

3. Has delivered 1stClass@Number 1 after 1st September 2019

Pupil exclusion criteria:

1. Participating in another mathematics intervention when 1stClass@Number 1 is being delivered (autumn 2023/spring 2024)

Date of first enrolment

01/03/2023

Date of final enrolment

30/09/2023

Locations

Countries of recruitment

England

United Kingdom

Study participating centre

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Sponsor information

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Sponsor type

Charity

Website

<https://educationendowmentfoundation.org.uk/>

ROR

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

Funder(s)

Funder type

Charity

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

Publication and dissemination plan

The protocol will be published on the Education Endowment Foundation website here:
<https://educationendowmentfoundation.org.uk/projects-and-evaluation/projects/1stclass-number1-2022-23-trial>

The researchers intend to publish the final report on the Education Endowment Foundation's website in July 2025.

Intention to publish date

31/07/2025

Individual participant data (IPD) sharing plan

The datasets analysed during this study will be stored in a non-publicly available repository, the EEF data archive. Within 3 months of the end of the project, NFER will send school and pupil data to the Education Endowment Foundation's (EEF) data archive partner. This will include enough pupil-level data for an analyst to replicate the impact analysis. At this point, EEF's data archive partner will keep a copy of the data and EEF will become the Data Controller. This data may be shared in an anonymised form with other research teams. Further matching to NPD and other administrative data may take place during subsequent research. All analyses will be conducted by Accredited Researchers within the Office for National Statistics' Secure Research Service.

IPD sharing plan summary

Stored in non-publicly available repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Funder report results		01/08/2025	12/08/2025	No	No