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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

Registration date
30/08/2023

Overall study status
Completed

Last Edited
12/08/2025

Condition category
Other

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] 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?
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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.

Primary study design
Interventional

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

Study type(s)
Other

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(s)
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.

Key secondary outcome(s)
There are no secondary outcome measures

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

Healthy volunteers allowed
No

Age group
Child

Lower age limit

6 Years

Upper age limit
7 Years

Sex
All

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
United Kingdom

England

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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 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

Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes