ISRCTN15932880 https://doi.org/10.1186/ISRCTN15932880

Assessment of the effectiveness of the intervention 1stClass@Number

Submission date
04/05/2016

Recruitment status
No longer recruiting

Registration date
28/06/2016

Overall study status
Completed

Last Edited
09/09/2020

Condition category
Other

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
Many children struggle with numeracy (mathematics), and fall behind their classmates at school. 1stClass@Number is a small-group programme delivered by teaching assistants (TAs) and is intended to support pupils struggling with numeracy in Year 2 (aged 5-6 years). It consists of 30 half-hour lessons, normally delivered 3 times a week for 10 weeks in addition to normal mathematics instruction. This means that pupils involved in the intervention spend approximately 15 additional hours on numeracy. The programme has a Post Office theme: children use letters, parcels, and house numbers to support their mathematics and write postcards to tell their class teachers about their achievements. The aim of this study is to evaluate the effectiveness of the 1stClass@Number programme in children struggling with mathematics at the start of Year 2.

Who can participate?
Children aged 6-7 years in Year 2 at a participating school in the 2016/17 academic year who are struggling with numeracy.

What does the study involve?
At the start of the study, all schools nominate four pupils who are struggling with mathematics and need additional support. The schools are randomly allocated to one of two groups. Schools in the first group take part in the 1stClass@Number programme. Teaching assistants (TAs) receive six training sessions so that they are able to deliver the programme. The programme involves a total of 30 half-hour long sessions, three times a week for 10 weeks. The sessions focus on helping children to think and talk about their mathematics, and develop their thought processes. Schools in the second group support pupils who struggle with mathematics in their usual way. These schools are offered the opportunity to take part in a similar mathematics or literacy programme for older pupils (Years 3 to 6).

What are the possible benefits and risks of participating?
Participants may benefit from improved skills in maths. There are no notable risks involved with participating.

Where is the study run from?
The study is run from Edge Hill University and takes place in 130 schools in West and South Yorkshire (UK)

When is the study starting and how long is it expected to run for?
January 2016 to December 2017

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

Who is the main contact?
Ms Rosanna Barros

Contact information

Type(s)
Scientific

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Protocol serial number
37482473.1

Study information

Scientific Title
A Randomised Control Trial of the 1stClass@Number intervention for Year 2 children

Study objectives
Primary hypothesis:
Children identified by their teachers as struggling with mathematics at the start of Year 2 who participate in the 1stClass@Number intervention should show greater gains in a test of quantitative reasoning than children identified by their teachers as struggling with mathematics at the start of Year 2 who do not participate in the intervention.

Secondary hypotheses:
1. The 1stClass@Number intervention is as effective for children entitled to FSM as for other children from the 1stClass@Number intervention, as assessed by the quantitative reasoning test
2. The 1stClass@Number intervention is as effective for boys as for girls, as assessed by the quantitative reasoning test

Ethics approval required
Old ethics approval format

Ethics approval(s)
Central University Research Ethics Committee of the University of Oxford, 24/02/2016

Study design
Cluster randomised controlled trial

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Mathematic attainment

Interventions
All schools will nominate four pupils, who are considered by teachers to have fallen behind their peers and need additional support. When this has been provided to the evaluation team, the schools will be randomly assigned either to an intervention or to a control group by the evaluation team, with an equal allocation of schools to each group. Four geographic clusters were identified so far after schools registered their interest to participate in the trial. Schools in each geographic cluster will be split in two blocks using the median for the number of children eligible for pupil premium, generating 12 blocks. Random allocation will be within these blocks, with an equal allocation of schools to each group, intervention or control.

Intervention group: The intervention is delivered by specially trained teaching assistants (TAs) to small groups of 4 children. Teaching Assistants (TAs) will receive six sessions of professional development to enable their delivery of the intervention. These TAs will deliver to the children five topics of six half-hour lessons each (a total of 30 half-hour sessions), normally 3 times a week over approximately 10 weeks. These sessions are in addition to usual, daily classes of mathematics. In this RCT, the sessions will be offered during term 1 of Year 2

Control group: Schools will take a business as usual approach to supporting pupils who struggle with mathematics. The programme designers at Edge-Hill University will offer schools in the control group the option of participating in a similar mathematics or literacy programme for older pupils (Years 3 to 6).

Intervention Type
Behavioural

Primary outcome(s)
Quantitative reasoning is measured using the Mathematical Reasoning Test at baseline (end of Year 1, June 2016) and at the end of the academic year in which the intervention will be administered (end of Year 2, June 2017).

Key secondary outcome(s))

Mathematical achievement is measured using the government's national test Key Stage 1 Mathematics paper one (Arithmetic) and two (Reasoning) after the intervention (approximately May 2017).

Completion date
01/12/2017

Eligibility

Key inclusion criteria
1. Children in Year 2 (aged 6-7 years) attending a participating school in West and South Yorkshire, in the 2016/17 academic year
2. Children who, at the start of Year 2, are judged by their teachers to be struggling with numeracy

Participant type(s)
Other

Healthy volunteers allowed
No

Age group
Child

Lower age limit
6 years

Upper age limit
7 years

Sex
All

Key exclusion criteria
Children not identified as struggling in mathematics.

Date of first enrolment
01/01/2016

Date of final enrolment
06/05/2016

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Edge Hill University
Every Child Counts
Faculty of Education
Edge Hill University
Woodlands Centre
Southport Road
Chorley
United Kingdom
PR7 1QR

Sponsor information

Organisation
Education Endowment Foundation

ROR
https://ror.org/03bhd6288

Funder(s)

Funder type
Charity

Funder Name
Education Endowment Foundation

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Funder report results	results		09/09/2020	No	No
Participant information sheet	Participant information sheet	28/06/2016	28/06/2016	No	Yes

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