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Encouraging participation in Children's University (CU) learning activities (beyond the normal school day) to improve aspirations and attainment of primary pupils

Submission date
16/11/2022

Recruitment status
No longer recruiting

Registration date
07/12/2022

Overall study status
Completed

Last Edited
12/08/2025

Condition category
Other

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

Plain English summary of protocol

Background and study aims
Children's University (CU) is a charity that works in partnership with schools to develop a love of learning in children aged 5 to 14 years old. CU aims to improve the aspirations and attainment of pupils by encouraging participation in learning activities beyond the normal school day. CU centres support schools to provide a range of learning opportunities, such as after-school clubs, projects and enrichment activities, and visits to destinations such as libraries, sports clubs, historic centres, museums, or anywhere that offers structured learning activities for children. This gives pupils the opportunity to develop character, self-esteem, resilience, motivation to learn, and life skills within and beyond the school curriculum. The aim of this trial was to investigate the impact of participation in CU-validated activities on maths and reading attainment amongst Year 6 pupils. The impact on non-academic outcomes (e.g. self-esteem, school engagement) will also be investigated.

Who can participate?
Maintained state-funded primary schools in one of the CU localities (Bexley, Devon & Cornwall, East London, Elevate (covering Sefton and Lancashire areas), Enrich, Essex & Suffolk, Peterborough, Rotherham, Wakefield, Westminster and Wolverhampton). All pupils completing Year 5 during the 2021/2022 academic year will be eligible to participate. To participate they must first volunteer to take part in the CU activities.

What does the study involve?
The recruited primary schools will be randomly allocated to either the intervention or control group. Intervention schools will be asked to nominate a CU coordinator to oversee the programme in school, and support participating pupils with access to CU online. CU local managers will source and validate (and in some cases, create) public learning activities and promote activities to schools and families. Schools in the control group will continue business as usual including whatever extracurricular activities (not validated by CU) would normally occur.

Pupils at intervention schools will be able to choose from a range of validated activities that will be available both in school (at least some during school hours), and outside school (that involves some form of structured learning). Hours spent on CU-validated activities will be logged online by the pupils or their parents or schools on the CU Online digital platform. Activity hours will be linked to an awards system, with awards given as CU Trust certificates at annual graduation ceremonies.

What are the possible benefits and risks of participating?
The potential benefits to pupils taking part in CU activities include increased attainment in maths and reading, as well as increased self-confidence and motivation to learn. There are also likely to be broader benefits that are not directly measured in this trial, such as the enjoyment of taking part in activities and the development of a wider range of transferable skills. No risks of participating are anticipated.

Where is the study run from?
National Foundation for Educational Research (NFER) (UK)

When is the study starting and how long is it expected to run for?
October 2019 to July 2023

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

Who is the main contact?
Palak Roy, p.mehta@nfer.ac.uk (UK)

Contact information

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Principal investigator

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Additional identifiers

Study information

Scientific Title
Randomised controlled trial investigating the effect of participation in Children's University extracurricular activities on Key Stage 2 maths and English attainment amongst primary pupils

Study objectives
The primary research questions for this trial are:
1. What is the impact of Children's University on pupils' maths attainment as measured by Key Stage 2 scaled scores?
2. What is the impact of Children's University on pupils' reading attainment as measured by Key Stage 2 scaled scores?

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 9/10/2019, National Foundation for Educational Research Code of Practice Committee (The Mere, Upton Park, Slough, SL1 2DQ, UK; +44 (0)1753 574123; a.donkin@nfer.ac.uk), ref: none provided

Primary study design
Interventional

Study design
Interventional two-arm unblinded cluster-randomized controlled trial

Study type(s)
Other

Health condition(s) or problem(s) studied
Participation in Children's University validated extracurricular activities amongst primary pupils

Interventions
Measures taken to ensure the trial is performed ethically are detailed below.
The evaluation will be conducted in accordance with NFER's Code of Practice, available at https://www.nfer.ac.uk/media/4124/nfer_code_of_practice.pdf. NFER, Children's University (CU) Trust and EEF will work together to ensure each organisation's policies can be applied in practice. Ethical agreement for participation in the trials will be provided by the headteacher or the senior leader of the school via signing a Memorandum of Understanding (MoU). Before requesting schools to share the pupil data, NFER will ask the schools to distribute a parent information sheet and parent withdrawal forms. This will enable parents to withdraw their child from the data processing for the trial. This will encompass pupil data, CU online activity data should their school be randomised to the intervention group, pupil survey data, pupil KS1, KS2 and background characteristics held on the National Pupil Database (NPD)). Schools will not share pupil data for the children whose parents withdrew them at this stage.
In addition, parents will be asked to express their interest in their child volunteering for CU, to help establish eligible volunteers prior to randomisation. This is an expression of willingness /ability to support their child to take part in a range of activities if possible. Where a parent expressly says this is not possible, their child will not form part of the eligible volunteers' list.

Randomisation was carried out by an NFER Statistician using R code. The code was stored for reproducibility and transparency and will be included as an appendix in the statistical analysis plan and final report). The statistician was not blinded to group allocation. Randomisation allocation data was then passed to NFER's Research and Product Operations team and Children's University Trust who liaised with schools.

Before randomisation pupils at all trial schools will be given the opportunity to volunteer to take part in CU-validated activities; pupils that volunteer form the trial population. Schools will then be randomised to either the control or intervention. Schools randomised to the control continue 'business as usual', including regular extracurricular activities not validated by CU. At intervention schools, CU activities will be made available to pupils; participation in these activities is recorded on the digital platform CU Online. Participation in activities is recognised at award ceremonies, with 30 or more hours earning the first award (bronze). CU activities will be available to both volunteer and non-volunteer pupils at intervention schools, but only volunteers will be included in the trial analysis. As the main analysis is 'intention-to-treat', volunteering pupils at intervention schools will be considered to have participated in the intervention, even if they have zero hours of activities recorded.

Intervention Type
Other

Primary outcome(s)
The following will be measured after approximately five school terms of participation in the intervention:
1. Maths attainment measured using KS2 maths scaled score, 0-999 continuous scale, obtained from National Pupil Database
2. Reading attainment measured using KS2 reading scaled score, 0-999 continuous scale, obtained from National Pupil Database

Key secondary outcome(s)
The following will be measured after approximately five school terms of participation in the intervention:
1. Engagement, measured using the Engagement subscale from the Panorama Social-Emotional Learning survey (as part of a bespoke survey developed by the evaluator)
2. Valuing of school, measured using the Valuing of school subscale from the Panorama Social-Emotional Learning survey (as part of a bespoke survey developed by the evaluator)

Completion date
01/07/2023

Eligibility

Key inclusion criteria
School inclusion criteria:
1. Maintained state-funded primary schools
2. Schools located in one of these Children's University localities: Bexley, Devon & Cornwall, East London, Elevate (covering Sefton and Lancashire areas), Enrich, Essex & Suffolk, Peterborough, Rotherham, Wakefield, Westminster and Wolverhampton

Pupil inclusion criteria:
1. Attendance at a school that meets the above criteria and has agreed to participate in the trial
2. Completing Year 5 during the 2021/2022 academic year

Participant type(s)
Learner/student

Healthy volunteers allowed
No

Age group
Other

Sex
All

Total final enrolment
5588

Key exclusion criteria
School exclusion criteria:
1. Schools already offering Children's University

2. Schools that have offered Children's University in the three years prior to the recruitment period

Date of first enrolment
01/11/2020

Date of final enrolment
01/05/2021

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
National Foundation for Educational Research
The Mere
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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.

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 school names, ID and intervention group variables, pupil data from CU online platform, pupil data from NPD and pupil survey data. At this point, EEF's data archive partner will keep a copy of the data and EEF will become the Data Controller. Data will also be shared with the Department of Education, the Office for National Statistics (ONS) and, in an anonymised form, potentially with other research teams. Further matching to NPD and other administrative data may take place during subsequent research.

NFER and Children's University Trust will retain personal data for one year after report publication in case there are any queries about the report. One year after the report publication, all personal data will be securely deleted.

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		01/07/2023	12/08/2025	No	No
Protocol file	version 1.0	19/08/2022	05/12/2022	No	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes