

# A randomized controlled trial of a digital reading programme

<b>Submission date</b> 06/10/2023	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 16/10/2023	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 12/10/2023	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

This study provides an opportunity not only to assess the impact, at a larger scale, of the Lexia® Core5® Reading Programme on young struggling readers' outcomes but also to contribute to the currently limited body of evidence regarding computer-assisted reading instruction in the UK. The researchers will measure the effectiveness of a computer-led reading intervention whilst also highlighting factors that make that intervention work (or not work). This study directly supports the objectives of the Department for Education's (DfE's) Accelerator Fund, which seeks to allocate supplementary resources towards children who are lagging in their acquisition of English and mathematics competencies. Furthermore, this study provides an opportunity to explore any different effects of the programme on students from socioeconomically disadvantaged backgrounds. This aligns with the EEF's broader mission to break the link between socioeconomic disadvantage and educational outcomes. In addition, this focus on disadvantaged populations aligns with the Government's broader levelling-up policy, which has designated specific educationally underperforming locales as Education Investment Areas (EIAs). Hence, this study supports broader policy objectives to improve educational provision for disadvantaged pupils.

### Who can participate?

All state-funded schools in England with pupils aged 6 – 7 years

### What does the study involve?

Participating schools will be randomly allocated to either receive Lexia or to act as a business-as-usual comparison group. The researchers will look at the impact of Lexia on struggling readers in Year 2 (age 6–7 years). The evaluation will also look at the impact specifically for pupils receiving free school meals and explore the reasons why the intervention may be a gap closer.

### What are the possible benefits and risks of participating?

The benefits of participating in the evaluation are that you can get the Lexia core reading programme for a heavily discounted rate. Schools that are allocated to control get a cash incentive at the end of the evaluation, which they can use towards the purchase of the programme in the following year.

Where is the study run from?  
Education Endowment Foundation (EEF) (UK)

When is the study starting and how long is it expected to run for?  
August 2022 to June 2025

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

Who is the main contact?  
Elena Rosa Brown, [erbrown@randeurope.org](mailto:erbrown@randeurope.org)

## Contact information

### Type(s)

Public, Scientific, Principal investigator

### Contact name

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## Additional identifiers

### Protocol serial number

022807.011

## Study information

### Scientific Title

Lexia Reading Core5® randomised controlled trial

### Study objectives

A trial to test the impact of Lexia Reading Core5® (Lexia), a computer-based integrated learning system that aims to improve reading skills by providing children with individualised reading instruction and practice in six areas: phonological awareness, phonics, structural awareness, automaticity, fluency, vocabulary, comprehension.

### Ethics approval required

Ethics approval required

## **Ethics approval(s)**

approved 31/03/2023, RAND's Human Subjects Protection Committee (HSPC) (1776 Main Street, Santa Monica, 90401, United States of America; +1 (310) 393-0411; hspcinfo@rand.org), ref: 2023-N0046

## **Study design**

Two-armed cluster-randomized controlled trial

## **Primary study design**

Interventional

## **Study type(s)**

Other

## **Health condition(s) or problem(s) studied**

Reading technology intervention

## **Interventions**

Reading Core5® (Lexia) is a computer-based integrated learning system that aims to improve reading skills. Lexia is being independently evaluated at an effectiveness level. This means that it will be delivered to a large number of schools under everyday conditions. The evaluation will be a two-armed cluster-randomised controlled trial, with randomisation at the school level. 224 schools will be randomly allocated to either receive Lexia or to act as a business-as-usual comparison group. This is a split cohort trial: half the total schools (112) will be recruited in 2023 to participate in the trial in 2023–24, with half recruited in 2024 to participate in 2024–25.

The primary outcome will look at the impact of Lexia on struggling readers in Year 2 (age 6–7 years). The evaluation will also look at the impact specifically for pupils receiving free school meals and explore the reasons why the intervention may be a gap closer.

## **Intervention Type**

Other

## **Primary outcome(s)**

Reading proficiency measured using the Woodcock Reading Mastery Test (WMRT-III) at baseline and endline

## **Key secondary outcome(s)**

There are no secondary outcome measures

## **Completion date**

01/06/2025

# **Eligibility**

## **Key inclusion criteria**

The trial will be implemented across 224 schools, recruited nationwide across England. Schools located in EIAs will be prioritised for recruitment to ensure at least half will be recruited from the said areas. To be considered for participation in the trial, schools will need to respond to a

publicly available request for expressions of interest. This request for expressions of interest (EOIs) was published on dedicated pages on the respective websites of the EEF and LexiaUK, the programme provider. The Queen's University of Belfast (QUB) lead school recruitment for this trial and will contact schools with the school information sheet and MOU documents and follow up on EOIs received via EEF and LexiaUK websites.

Schools that express interest will then be screened against the following eligibility criteria:

1. Have a minimum of 8 pupils (and a maximum of 16 pupils) that would be eligible for Lexia
2. Not currently involved in any other EEF trial focusing on Year 2
3. Have not held a Lexia licence in the 12 months prior to July 2022 (for Cohort 1) and July 2023 (Cohort 2)
4. Able to provide the necessary IT equipment required in order to support the intervention.

The trial participants will be struggling readers. Eligible pupils will be identified by their classroom teacher when they are in Year 1, the term before they are to go into Year 2, using written guidance provided by LexiaUK to select struggling readers. In each school, a minimum of 8 and a maximum of 16 struggling readers will receive Lexia. The written pupil selection guidance lays out the following criteria:

1. They are able to stay on task at a computer for 20–30-minute sessions.
2. They are available to attend 4-5 Lexia sessions every week during the school's planned delivery schedule.
3. Hearing-impaired pupils may struggle if their amplification device does not enable them to hear spoken language and isolated sounds. Deaf pupils may not be suitable candidates for Lexia use.
4. Visually impaired pupils might benefit from Lexia if they can read print on a computer screen or tablet. Blind pupils may not be suitable candidates for Lexia use.
5. For pupils with physical disabilities such as paralysis or cerebral palsy, specialist devices provided by the school and set up by assistive technology specialists may help access to Lexia.

These struggling readers will be identified by teachers, based on existing evidence that teachers are able to successfully identify appropriate students when armed with the correct guidance (Hoge and Coladarci, 1989). Each participating school will nominate one Year 2 teacher and one teaching assistant, who will be given written pupil selection guidance by LexiaUK, informing them that the program will be appropriate for struggling readers but not for those who have severe learning difficulties.

All pupils about to go into Year 2 will either be in a school assigned to treatment or to control, meaning all pupils in a single school who are included in the trial will be assigned to the same condition. The researchers select pupils in this way (i.e., randomisation at the school level) to minimise the occurrence of resources being diverted away from control to treated pupils – a confounding event observed during the efficacy trial.

**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**

Does not meet the inclusion criteria

**Date of first enrolment**

01/04/2023

**Date of final enrolment**

01/07/2024

**Locations****Countries of recruitment**

United Kingdom

England

**Study participating centre**

All state-funded schools in England are eligible to take part

United Kingdom

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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 data from the trial will be archived in the EEF archive, held on the ONS's SRS. Data will be pseudo-anonymised.

The type of data stored results from testing, pupil names, dates of birth, FSM status, trial allocation status.

The process for requesting access (if non-publicly available): through the National Pupil Database (NPD).

Dates of availability: after the publication of the final report.

Whether consent from participants was required and obtained: the legal basis for processing data under GDPR is legitimate interest.

Comments on data anonymization: all data will be pseudo-anonymised, with data being identifiable by a small number of data controllers within the Department of Education National Pupil Database (NPD) Team – the team that controls the repository.

## IPD sharing plan summary

Stored in publicly available repository

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes
<a href="#">Protocol (other)</a>			12/10/2023	No	No
<a href="#">Study website</a>	Study website	11/11/2025	11/11/2025	No	Yes