

A cluster-randomised controlled trial of the Accelerated Reader literacy programme for primary school pupils

Submission date 18/04/2016	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 05/05/2016	Overall study status Completed	☐ Statistical analysis plan ☐ Results
Last Edited 04/05/2016	Condition category Other	☐ Individual participant data ☐ Record updated in last year

Plain English summary of protocol

Background and study aims

This study will test whether using a computer-based reading scheme – Accelerated Reader (AR) – leads to primary schools pupils improving their reading ability when compared to pupils who do not receive AR. We also wish to find out whether there are specific effects for pupils who are eligible for free school meals.

Who can participate?

The study will recruit around 200 primary schools in England and all Year 4 and Year 5 pupils in these schools will be eligible to take part in the study.

What does the study involve?

Participating schools are randomly allocated to either the intervention or the control group. Pupils at the intervention group schools take part in the Accelerated Reader reading scheme, which involves several elements but the essence is that pupils are assessed and set reading that matches but also extends their reading ability. At the same time, schools are required to change their timetable so that all pupils have protected reading time and pupils are supported in their reading by teachers. It is up to the schools how they implement the protected reading time. Pupils are also assessed on their understanding of the books they have read by short tests that form part of the AR program. Teachers are then able to see reports on their pupils and their pupils' progress. At the control group schools Year 4 and Year 5 pupils receive 'business as usual' in terms of how their schools teach and work on pupil reading. In the second year of the study, Year 3 and Year 4 pupils at the control schools are able to access the Accelerated Reader programme. Control group pupils in Year 4 and Year 5 are tracked using data from the National Pupil Database.

What are the possible benefits and risks of participating?

By participating pupils may improve their reading ability. There are no anticipated risks for pupils participating in the study.

Where is the study run from?

The study is being run by RAND Europe and the Faculty of Education, University of Cambridge, both based in Cambridge (UK). RAND Europe is the lead centre. Accelerated Reader was developed by Renaissance Learning, who will be working with staff from the National Foundation for Educational Research (NFER) to implement the AR software.

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

January 2016 to December 2018

Who is funding the study?

Education Endowment Foundation (UK)

Who is the main contact?

Dr Alex Sutherland

Contact information

Type(s)

Scientific

Contact name

Dr Alex Sutherland

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Additional identifiers

Study information

Scientific Title

A cluster-randomised controlled trial of the Accelerated Reader literacy improvement intervention for Year 4 & Year 5 pupils in 200 English primary schools

Study objectives

Hypothesis 1: Accelerated Reader will have a positive effect on the reading comprehension of pupils that are randomly assigned to the intervention compared to pupils in control schools.

Hypothesis 2: Accelerated Reader will have a positive effect on the reading comprehension of pupils who are eligible for free school meals and who are randomly assigned to the intervention.

Ethics approval required

Old ethics approval format

Ethics approval(s)

The research was reviewed by RAND Europe's Ethics Advisory Board in April 2016 and approved via the Faculty of Education (University of Cambridge) research ethics process on 04/05/2016.

Primary study design

Interventional

Study design

Cluster-randomised controlled experiment

Study type(s)

Other

Health condition(s) or problem(s) studied

Reading comprehension in primary school pupils in Year 4 and Year 5 in England

Interventions

The intervention logic for the Renaissance Learning: Accelerated Reader programme (AR) involves:

1. The tailoring of assigned reading to pupils
2. The importance of reading within a pupil's zone of proximal development
3. A constant feedback loop between reading and assessment

These are all designed to increase the amount of time children spend reading at school and thus ingrain the habit of reading.

The use of a standardised online platform to assist with initial screening and ongoing testing means that there is a much lower risk of variation in how these work in practice (training or IT problems notwithstanding). But, evaluations of AR also hint at a more complex intervention. For example, AR also requires (iv) the initial selection of pupils and a range of book levels appropriate to them; (v) adequate resources in terms of books and IT infrastructure; (vi) protected and adequate amount of time for students to read on a daily basis (often on school premises); and (vii) teachers to guide readers – especially the youngest and weakest – on book selection within their zone of proximal development. There is an element of (viii) staff training required, meaning that there is a need to understand how well this has worked. Further, a previous EEF evaluation of AR (Gorard et al., 2015) illustrated a high degree of variability in how the additional reading was actually implemented – and this is effectively the largest part of the intervention. Taken together, these elements suggest that schools' understanding of how to implement the programme, how effectively schools were able to schedule reading time, and how the intervention was 'sold' to pupils could all affect treatment outcomes.

Year 4 and Year 5 pupils in control schools will receive treatment as usual. In the second year of the trial the AR software will be made available to Year 3 and Year 4 pupils in control schools. Compliance with treatment allocation will be monitored using routine administrative data collected by the AR software.

Intervention Type

Behavioural

Primary outcome(s)

1. For Year 4 pupils the primary outcome will be a stand-alone test of reading comprehension at the end of the summer term in 2017 (approximately June/July), one school year after the intervention begins
2. For Year 5 pupils the primary outcome will be Key Stage 2 national tests taken in Year 6, two years after the intervention begins

Key secondary outcome(s)

1. Cost-effectiveness of the intervention through collecting data on direct financial costs, time costs and any prerequisite costs (e.g. in terms of purchasing books)
2. The effect of fidelity with the intervention, using routine data collected by the AR system
3. Compliance with allocation, through monitoring of control pupils' access to AR in the second year of the study

Completion date

31/12/2018

Eligibility

Key inclusion criteria

All Year 4 and Year 5 pupils in participating schools.

Participant type(s)

Other

Healthy volunteers allowed

No

Age group

Child

Sex

All

Key exclusion criteria

1. Special educational facilities for pupils with physical and/or mental and/or behavioural disorders
2. Pupil Referral Units

Date of first enrolment

01/03/2016

Date of final enrolment

22/04/2016

Locations

Countries of recruitment

United Kingdom

England

Study participating centre**RAND Europe**

Westbrook Centre
Milton Road
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Study participating centre**University of Cambridge**

Faculty of Education
184 Hills Road
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United Kingdom
CB2 8PQ

Sponsor information**Organisation**

RAND Europe (UK)

Organisation

University of Cambridge (UK)

Organisation

RAND Europe

ROR

<https://ror.org/037pk1914>

Funder(s)**Funder type**

Charity

Funder Name

Education Endowment Foundation (UK)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not expected to be made available