

# Independent evaluation of ReflectED

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<b>Registration date</b> 05/10/2017	<b>Overall study status</b> Completed	<input checked="" type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 04/01/2023	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims:

Metacognition is awareness and understanding of one's own thought processes. It is increasingly recognised as valuable for student learning for students of all ages, valuable in terms of additional progress that can be made for something that is relatively low cost to implement. Research suggests that there is a link between metacognition and student attainment. ReflectED is a metacognition-based programme developed by Rosendale Primary School, in partnership with London Connected Learning Centre (London CLC) and the National Education Trust (NET). A previous evaluation of ReflectED reported a positive impact on student progress in maths. Research about metacognition also suggests positive links to reading. ReflectED is a whole school approach delivered through a series of pre-prepared lesson plans spanning Reception to Key Stage 2 (KS2). Teachers provide opportunities for pupils to make reflections and make use of the metacognitive skills in their day-to-day learning. The aim of this study is to investigate the effectiveness of the whole school application of ReflectED on attainment in maths and reading for students in KS1 and KS2. This study is also exploring the impact of ReflectED on student's self-reported levels of metacognition in KS2.

### Who can participate?

Students in schools that have signed up to participate in the evaluation of ReflectED. The evaluation focuses on students who are in year 5 and year 1 in January 2018 and who will therefore be in year 6 and year 2 respectively in July 2020.

### What does the study involve?

Schools are randomly allocated to one of two groups. The schools in the first group receive ReflectED, and also receive funding to cover the costs of releasing specified staff to attend training. ReflectED is a whole school approach delivered through a series of pre-prepared lesson plans spanning Reception to Key Stage 2 (KS2). Teachers provide opportunities for pupils to make reflections and make use of the metacognitive skills in their day-to-day learning. The whole school approach to ReflectED being evaluated includes a visit to Rosendale School, an initial day of training (launch event) for head teachers and their nominated lead practitioners and termly local hub training sessions which they then cascade to the remaining teachers in each intervention school. The schools in the second group continue as usual in their approach to teaching, they are an offered alternative (one session) training opportunity, are given the option

to access ReflectED after the study and are offered a small financial incentive (£250). At the end of the school year, students' math and English exams results are reviewed to see if there has been any change in their achievement levels.

What are the possible benefits and risks of participating?

Participants may benefit from potentially improving their mathematics, reading or metacognition skills. There are no notable risks involved with taking part in this study.

Where is the study run from?

The study is a collaboration involving York Trials Unit, University of York; the School of Education, Durham University and the Department of Education, University of York. The study takes place in primary schools in the UK.

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

February 2017 to March 2020

Who is funding the study?

Education Endowment Foundation (UK)

Who is the main contact?

1. Dr Louise Gascoine (public)
2. Prof. David Torgerson (scientific)

### **Study website**

<https://www.york.ac.uk/healthsciences/research/trials/research/trials/reflected/>

## **Contact information**

### **Type(s)**

Public

### **Contact name**

Dr Louise Gascoine

### **ORCID ID**

<http://orcid.org/0000-0002-5688-6176>

### **Contact details**

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Department of Health Sciences  
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### **Type(s)**

Scientific

### **Contact name**

Prof David Torgerson

**Contact details**

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YO10 5DD

**Additional identifiers**

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**

ReflectED protocol September 2017\_1.8

**Study information****Scientific Title**

Independent Evaluation of ReflectED metacognition: a pragmatic two armed cluster randomised controlled trial

**Study objectives**

Primary research questions:

1. How effective is ReflectED in improving pupil outcomes in maths at the end of KS2?
2. How effective is ReflectED in improving pupil outcomes in reading at the end of KS2?

Secondary research questions:

1. How effective is ReflectED in improving pupil outcomes in maths at the end of KS1?
2. How effective is ReflectED in improving pupil outcomes in reading at the end of KS1?
3. How effective is ReflectED in improving pupil outcomes in grammar, punctuation and spelling (GPS) at the end of KS2?
4. How effective is ReflectED in improving primary and secondary outcomes for pupils with Free School Meals (FSM)?
5. Does ReflectED have an impact on metacognition for pupils in KS2, as measured by the Junior Metacognitive Awareness Inventory (JrMAI)?

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

School of Education, Durham University, 09/10/2017, ref: 2840

**Study design**

Pragmatic two-armed cluster randomised controlled trial

**Primary study design**

Interventional

## **Secondary study design**

Cluster randomised trial

## **Study setting(s)**

School

## **Study type(s)**

Other

## **Participant information sheet**

Not available in web format, please use contact details to request a participant information sheet

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

Students in year 1 and year 5 at the beginning of the intervention period (academic year 2017 /2018) in trial schools

## **Interventions**

Randomisation is implemented at school level, ReflectED is a whole school intervention taught across Reception - KS2 (aged 4 - 11 years, primary school). The data collected in this study, for the purposes of evaluating ReflectED, will have a dual focus on KS1 (pupils aged 5 - 6 years in year 1 at the beginning of the intervention period in January 2018) and KS2 (pupils in year 5 aged 9 - 10 years at the beginning of the intervention period in January 2018). Randomisation will be stratified by geographical location, school size and percentage of EverFSM (a record that shows if students have been entitled to FSM (free school meals)). Participating schools will be randomised to one of two conditions: the intervention group or the control group.

Participating schools allocated to the intervention group will receive ReflectED as described below:

ReflectED is a metacognition based programme developed by Rosendale Primary School, in partnership with London Connected Learning Centre (London CLC) and the National Education Trust (NET). ReflectED focuses on metacognition skills (helping learners to think about their own learning and reflect on 'learning moments and strategies') to support attainment (ReflectED, 2017). ReflectED is a whole school approach delivered through a series of pre-prepared lesson plans spanning Reception to Key Stage 2 (KS2) (including technology aided reflection and other visual scaffolds). Teachers provide opportunities for pupils to make reflections and make use of the metacognitive skills in their day-to-day learning. The whole school approach to ReflectED being evaluated includes a visit to Rosendale School, an initial 1 day of training (launch event) for head teachers and their nominated lead practitioners and termly local hub training sessions. Training received by the lead teacher and head teacher is cascaded to the remaining teachers in each intervention school. Intervention schools will be expected to release specified staff for training, for this they will be provided with funding to provide cover to release the specified staff.

Participating schools allocated to the control group will be required to continue with business as usual (usual teaching). Control schools will be provided with a choice of local and high quality professional development options during the intervention period and will be eligible for a financial payment of £250 following their submission of the final data collected at the end of the

trial. Control schools will also have free access to ReflectED for the following academic year (2019-2020).

### **Intervention Type**

Behavioural

### **Primary outcome measure**

Raw KS2 scores in maths and reading for the Year 5 pupils (at the end of Year 6, when they will be aged 10-11 years), collected from the National Pupil Database (NPD). The NPD holds information (exam results, student characteristics) about all students who attend schools in England. This primary outcome data will be collected in summer 2019.

### **Secondary outcome measures**

KS1 maths raw scores and the KS1 reading raw scores collected from schools (encrypted and transferred securely) for the Year 1 pupils (at the end of Year 2, when they will be aged 6-7 years old)

Additional secondary outcomes for KS2 will be:

1. Grammar, punctuation and spelling (GPS) score collected via NPD in summer 2019
2. Junior Metacognitive Awareness Inventory (JrMAI, version A). This data will be collected by the evaluation team at baseline (autumn 2017) and at the end of the intervention period (summer 2019). The JrMAI is a self-report measure that will be administered by class teachers and returned in an anonymous form to the the evaluation team

### **Overall study start date**

08/02/2017

### **Completion date**

31/03/2020

## **Eligibility**

### **Key inclusion criteria**

Schools will be eligible to participate if they are not currently implementing ReflectED Metacognition and are willing to implement the programme throughout the school (including participating in training), if they are randomised to the intervention group. There will be an emphasis on recruiting schools with average or higher proportions of disadvantaged pupils (as measured by EverFSM in the National Pupil Database).

### **Participant type(s)**

Other

### **Age group**

Child

### **Sex**

Both

### **Target number of participants**

140 schools (8400 children)

**Total final enrolment**

9116

**Key exclusion criteria**

Not meeting inclusion criteria (as specified)

**Date of first enrolment**

09/10/2017

**Date of final enrolment**

30/11/2017

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

England

United Kingdom

**Study participating centre****York Trials Unit**

University of York

York

United Kingdom

YO10 5DD

**Study participating centre****School of Education, Durham University**

Leazes Road

Durham

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DH1 1TA

**Study participating centre****Department of Education**

University of York

York

United Kingdom

YO10 5DD

**Sponsor information**

**Organisation**

University of York

**Sponsor details**

Research Innovation Office  
Innovation Centre  
York Science Park  
York  
England  
United Kingdom  
YO10 5DD

**Sponsor type**

University/education

**ROR**

<https://ror.org/04m01e293>

**Funder(s)****Funder type**

Charity

**Funder Name**

Education Endowment Foundation (EEF), UK

**Results and Publications****Publication and dissemination plan**

1. Study documents (SAP, protocol etc) will be published on the funder website as soon as possible: <https://educationendowmentfoundation.org.uk/>
2. Publication of a final report by the Education Endowment Foundation
3. Planned publication of the outcomes of the research in academic journals

**Intention to publish date**

01/07/2022

**Individual participant data (IPD) sharing plan**

The datasets generated during and/or analysed during the current study will be deposited in the EEF Data Archive (in association with the Fischer Family Trust). Enquiries to FFT's Datalab can be made via [educationdatalab@fft.org.uk](mailto:educationdatalab@fft.org.uk).

**IPD sharing plan summary**

Stored in repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Protocol (other)</a>	V2.1	01/06/2018	11/08/2022	No	No
<a href="#">Statistical Analysis Plan</a>	V1	01/05/2019	11/08/2022	No	No
<a href="#">Funder report results</a>	Funder (Education Endowment Foundation) evaluation report	15/12/2022	04/01/2023	No	No