

Independent evaluation of ReflectED

Submission date 26/09/2017	Recruitment status No longer recruiting	☒ Prospectively registered ☒ Protocol
Registration date 05/10/2017	Overall study status Completed	☒ Statistical analysis plan ☒ Results
Last Edited 04/01/2023	Condition category Other	☐ 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)

Contact information

Type(s)

Public

Contact name

Dr Louise Gascoine

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Additional identifiers

Protocol serial number

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

Study type(s)

Other

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(s)

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.

Key secondary outcome(s)

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

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

Healthy volunteers allowed

No

Age group

Child

Sex

All

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

United Kingdom

England

Study participating centre**York Trials Unit**

University of York

York

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YO10 5DD

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

Leazes Road

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Study participating centre**Department of Education**

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Sponsor information

Organisation

University of York

ROR

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

Funder(s)

Funder type

Charity

Funder Name

Education Endowment Foundation (EEF), UK

Results and Publications

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.

IPD sharing plan summary

Stored in repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Funder report results	Funder (Education Endowment Foundation) evaluation report	15/12/2022	04/01/2023	No	No
Protocol (other)	V2.1	01/06/2018	11/08/2022	No	No
Statistical Analysis Plan	V1	01/05/2019	11/08/2022	No	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes