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Let's Think Secondary Science: testing a cognitive development programme for science

Submission date	Recruitment status	[_] Prospectively registered
14/08/2014	No longer recruiting	[_] Protocol
Registration date	**Overall study status**	[_] Statistical analysis plan
13/10/2014	Completed	[X] Results
Last Edited	**Condition category**	[_] Individual participant data
11/08/2017	Other	

Plain English summary of protocol

Background and study aims
This study assesses the effectiveness of Lets Think Secondary Science (LTSS), a series of 19 science lessons taught alongside normal science lessons to students in Year 7 and through into Year 8. They are designed to help pupils improve their thinking skills as well as their science achievement. This study is conducted across two years with 2013/14 Year 7 classes in 50 secondary schools in England.

Who can participate?
Schools with a Year 7 and Year 8 in Yorkshire/North East, Midlands and South West

What does the study involve?
Schools are randomly allocated to either use Lets Think Secondary Science starting in September 2013 and ending in June 2015, or to be a comparison school teaching science as usual. After June 2015, all participating schools, including the comparison schools, are able to use Lets Think Secondary Science if they wish. At the end of the two years, students complete assessments in Science, English, Maths and thinking skills. Teachers either undergo training and school visits to support them in using LTSS lessons, or teach science as usual in the control schools. LTSS teachers also receive in-school support from a member of the senior management team and peer-to-peer support.

What are the possible benefits and risks of participating?
All Year 7 science teachers at each intervention school receive professional development sessions in science teaching, and a set of science lesson plans and resources. This opportunity is also given to science teachers at the control schools after the two-year study period finishes.

Where is the study run from?
Institute for Effective Education, University of York (UK)

When is the study starting and how long is it expected to run for?
May 2013 to July 2015

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

Who is the main contact?
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Contact information

Type(s)
Scientific

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Additional identifiers

Study information

Scientific Title
Let's Think Secondary Science: testing a cognitive development programme for science: a cluster randomised controlled trial

Acronym
LTSS

Study objectives
The use of a set of 19 science lessons based on Cognitive Acceleration through Science Education principles across the first two years of secondary school will have a positive impact on students' science attainment and their attainment in English, Maths and thinking skills.

Ethics approval required
Old ethics approval format

Ethics approval(s)
The Education Ethics Committee, University of York, 20/08/2013

Primary study design
Interventional

Study design
Cluster randomised controlled trial

Study type(s)
Other

Health condition(s) or problem(s) studied
Science education

Interventions
Random allocation at school level stratified by region (three regions involved).

Science teachers in the treatment group will undergo training and deliver LTSS lessons to their 2013/14 cohort of students. Teachers in the control schools will teach science as usual.

Intervention Type
Other

Phase
Not Applicable

Primary outcome(s)
Science assessment based on curriculum and age-appropriate questions from pre-existing KS3 SATs tests.
Schools will be asked to administer the post-test measures in June 2015

Key secondary outcome(s)
1. GL Assessments Progress in Maths
2. GL Assessments Progress in English
3. GL Assessments Cognitive Abilities Test (CAT4)
Schools will be asked to administer the post-test measures in June 2015

Completion date
30/07/2015

Eligibility

Key inclusion criteria
Schools with a Year 7 and Year 8 in Yorkshire/North East; Midlands; South West

Participant type(s)
Other

Healthy volunteers allowed
No

Age group
Child

Sex

All

Key exclusion criteria
1. Children in eligible year group in eligible schools whose parents do not wish them to take part
2. Children who start the school after spring term 2014 (i.e., miss more than four terms of LTSS lessons)

Date of first enrolment
01/05/2013

Date of final enrolment
30/07/2015

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
University of York
York
United Kingdom
YO10 5DD

Sponsor information

Organisation
Education Endowment Foundation (UK)

ROR
https://ror.org/03bhd6288

Funder(s)

Funder type
Government

Funder Name
Education Endowment Foundation (UK)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Funder report results	results			No	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes