

Research linking physical ucation to improved thinking and learning in school

# INVITATION TO TAKE PART

State-funded secondary schools within a radius of Oxford are being invited to take part in the 'Fit to Study' project (the area covers, but is not limited to, Oxfordshire, Berkshire, Buckinghamshire, Gloucestershire, Hampshire, Greater London, Wiltshire and areas of Bedfordshire, Northamptonshire, the West Midlands, Somerset and Worcestershire).

This sheet tells you more about what is involved. Please read it and if you have any questions get in touch using the details at the end of the document.

If you are happy for your school to take part in the project, please complete the enclosed 'Memorandum of Understanding' (which comprises a Consent Form and Reply Form) and return it in the FREEPOST envelope provided. A researcher will then contact you within two weeks to discuss the next steps.

### What is the purpose of the project?

Can changing the nature of PE lessons help children do better at school? This is the key question that the project is aiming to answer.

Physical exercise has been shown to have positive effects on the brain and to improve cognitive performance, both immediately and in the long-term. This project is being conducted to understand better how the content of school PE, focusing on Year8 pupils during the academic year 2017/18 in this project, affects brain function and academic performance.

A programme of activities for PE lessons has been developed by Oxford Brookes University (in collaboration with Oxfordshire Sport and Physical Activity) to try to optimise the benefit of PE for brain function. Staff from Oxford Brookes University will train PE teachers to deliver this programme.

#### Who is conducting the research?

A team of researchers at the University of Oxford and Oxford Brookes University will carry out research assessing the impact of the' Fit to Study' programme on fitness, wellbeing, cognitive function and academic attainment.

NatCen Social Research have been commissioned by the project funders (Education Endowment Foundation (EEF) and the Wellcome Trust) to conduct an Independent Evaluation of the 'Fit to Study' programme, including analysis of its impact on academic attainment.

#### Who is taking part?

'Fit to Study' is aiming to recruit 100 secondary schools (excluding Independent and Grammar schools) from within a 75 mile radius of Oxford. The aim is to recruit a diverse and inclusive range of schools.

















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# Does my school have to take part?

It is completely up to you whether or not your school takes part in the project. If you sign up, and then change your mind, you are free to withdraw at any time without giving a reason.

# What are the benefits and risks of taking part?

We hope that your school will find taking part in the project interesting. Participation presents an excellent opportunity for pupils to see science in action and to recognise the importance of physical wellbeing.

By participating you are helping us to increase understanding of the importance of PE in the curriculum and this could potentially have a major influence on future education policy.

We do not foresee any risks associated with participation. The participating pupils may sometimes be more physically active than they would usually be during PE lessons, but this will be within currently recommended levels.

All schools will be given £500 at the end of the project as a thank-you for taking part.

### What will participation involve?

This research is a randomised controlled study (RCS) and participating schools will be randomly assigned to either an Intervention Group (IG) and be asked to deliver the new PE programme, or to a **Control Group** (CG) and asked to continue with their normal PE lessons.

For both Groups there will be a number of activities for schools to undertake, both at the start, during, and at the end of the study. A detailed description of the tasks is provided later, but the key tasks are listed below, and illustrated in Figure 1.

- Provision of Pupil Data & Information Dissemination
- PE Teacher Training for Intervention Schools
- Online Cognitive Tests (pre- and post-study)
- Wellbeing Questionnaires (pre- and post-study)
- Physical Activity Assessments (before and during the study)
- Fitness (Beep) Test
- NatCen's Independent Evaluation of the Fit to Study programme (including two short school surveys, the administration of a Maths attainment test, researchers observing PE lessons and interviews with teachers about the programme. [More information is provided in the NatCen Information Sheet, attached].

















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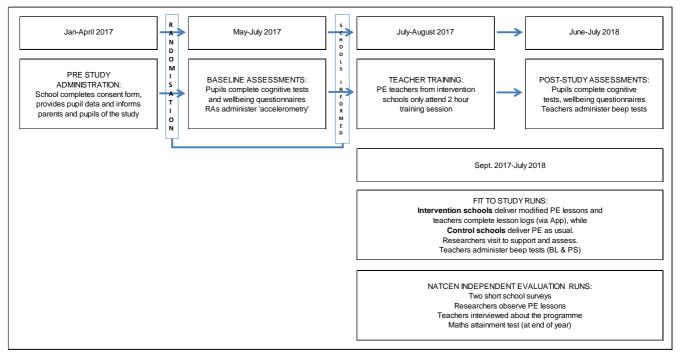


Figure 1: The Timeline and Key Tasks for the 'Fit to Study' Project

# **MRI Sub Study**

In addition, the University of Oxford will be conducting a sub-study with a small number of pupils from a sub-set of schools. This is an optional part of the project and will be subject to separate written / informed consent from the pupils' parents/guardians. This will involve MRI brain scanning at the University of Oxford, as well as additional fitness and cognitive tests. Further detail will be made available to schools that are selected to take part in the Main Study (from May 2017).















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Task	CG	IG
During recruitment, school to provide the first name, last name, gender, date of birth, Free School Meal eligibility, form group and Unique Pupil Number (UPN) for all current Year 7 pupils. We require names as some tests (e.g. fitness tests) will be administered by teachers who will temporarily record scores by pupils' names. These scores will be entered into our secure database by pupil ID and not by pupil name.	<b>√</b>	✓
Schools will be required to distribute project information sheets and forms to parents/guardians of the current Year 7 pupils (and to the pupils).	<b>✓</b>	✓
Schools must allow a researcher to visit the school once per term (4 times over the course of the study) to record Year 8 pupils' physical activity during PE lessons.	<b>✓</b>	✓
Schools must administer (with the support of the research team) the following tests at the start and end of the research period, to all pupils in the year group:  O A shuttle-run or 'beep test' to measure cardiovascular fitness. [conducted in the first, and last PE lesson of the year]  O An online cognitive (memory and attention) test. [administered at school or given as homework: up to 1hr to complete]  O A wellbeing survey (consisting of a series of questionnaires, covering topics including physical activity, sleep, mood, motivation and wellbeing).  [administered at school or given as homework: up to 1hr to complete]	<b>✓</b>	<b>√</b>
Facilitate NatCen's Independent Evaluation of the 'Fit to Study' programme, including completing two short school surveys, supporting the administration of a Maths attainment test, and allowing researchers to observe PE lessons and invite teachers to be interviewed about the programme.	<b>~</b>	✓
All Year 8 PE teachers must attend a two-hour training session (on delivery of the new PE lesson programme) before starting the study. [July - August 2017] Top-up training will be provided once every term (when a member of the research team visits).	×	✓
A school assembly will be delivered by the PE teachers to Year 8 pupils prior to commencing the study (in the Autumn Term 2017): materials will be provided.	×	✓
PE teachers will deliver the new PE programme for the full academic year 17/18.	*	✓
During the study, PE teachers will be required to log basic information about every PE lesson via a smartphone-based app. [Will take less than a minute / lesson].	×	✓















# How will your data be used, and will the data generated during the project be kept confidential?

All the information that we gather about individual pupils, teachers and schools will be kept completely confidential in accordance with the Data Protection Act (1998). Pupil data collected from schools by NFER and pupil test outcomes will be securely transferred to the research teams at the University of Oxford, Oxford Brookes University and NatCen, and will not be made available to anyone outside of these research teams.

With parental permission, NatCen will match the pupil data collected from schools and pupil test outcomes to the National Pupil Database (NPD), to allow linkage of the primary outcome measure to prior attainment.

On conclusion of the project, the Fischer Family Trust (see http://www.fft.org.uk/) will collate and anonymise the data for upload to the UK Data Archive. The archived data will be available in an anonymised form with restricted access for research purposes only.

No school or pupil will be identified in any report arising from the research.

# What will happen to the results of the research project?

We will publish our findings in academic and non-academic journals. We will also take part in conferences and other events to tell people about our results.

NatCen will also publish their Independent Evaluation report.

# Who is overseeing the project?

'Fit to Study' is being led by Prof. Heidi Johansen-Berg, a Professor of Cognitive Neuroscience in the Oxford Centre for Functional MRI of the Brain, at the University of Oxford, in association with Oxford Brookes University, NatCen Social Research and the National Foundation for Educational Research (NFER). NFER is leading on the recruitment of schools to the project.

### How is the project funded?

The project is jointly-funded by the Education Endowment Foundation (EEF) and the Wellcome Trust, under their 'Education and Neuroscience Programme' (ENP). For further details visit https://educationendowmentfoundation.org.uk/our-work/projects

















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# Concerns about the project

The 'Fit to Study' project is led by the University of Oxford. The University has strict ethical procedures on conducting research with young people. The 'Fit to Study' project has been reviewed by, and received ethical clearance through, the Central University Research Ethics Committee (Registration No: R48879/RE001), and complies with the ethical requirements of Oxford Brookes University.

If you have a concern about any aspect of the project, you should contact the Principal Investigator, Prof. Heidi Johansen-Berg, through the Project Manager Nick Beale (contact details provided below).

If you remain unhappy or wish to make a formal complaint, please contact the chair of the Research Ethics Committee at the University of Oxford who will seek to resolve the matter in a reasonably expeditious manner:

Chair, Medical Sciences Inter-Divisional Research Ethics Committee; ethics@medsci.ox.ac.uk Address: Research Services, University of Oxford, Wellington Square, Oxford OX1 2JD

#### **Contact for Further Information**

If you have any questions about the study please contact:

#### For Project Enquiries:

Nick Beale, Project Manager (Fit to Study) Oxford Brookes University, OxINAHR, The Colonnade, Headington Campus, Gipsy Lane, Oxford, OX3 0BP

E: fittostudy@brookes.ac.uk

T: 01865 482752

W: http://www.oxinahr.com/get-

involved/fittostudy

# For Enquiries about School Recruitment:

Keren Beddow, Research Manager National Foundation for Educational Research (NFER), The Mere, Upton Park, Slough SL1 2DQ

E: fittostudy@nfer.ac.uk

T: 01753 637338

W: www.nfer.ac.uk/fittostudyFAQs

# For Enquiries about the Evaluation:

Lydia Marshall, Senior Researcher NatCen Social Research, 35 Northampton Square, London EC1V 0AX

E: fittostudy@natcen.ac.uk

T: 0207 549 8509 W: www.natcen.ac.uk Thank you for taking time to read this information sheet.











