



Economic
and Social
Research Council



Understanding the role of active lessons on mathematics learning **ESRC DTP Collaborative Studentship**

Loughborough University and Teach Active

The Midlands Graduate School is an accredited Economic and Social Research Council (ESRC) Doctoral Training Partnership (DTP). One of 14 such partnerships in the UK, the Midlands Graduate School is a collaboration between the University of Warwick, Aston University, University of Birmingham, University of Leicester, Loughborough University and the University of Nottingham.

Loughborough University as part of Midlands Graduate School is now inviting applications for an ESRC Doctoral Studentship in association with our collaborative partner **Teach Active** to commence in October 2023.

Mathematics skills are important for children's academic achievement and future economic, social wellbeing and overall quality of life. Data suggest that the mathematics attainment of British children has been disproportionately negatively impacted by the COVID-19 disruptions, thus focusing on strategies that could enhance the mathematics attainment of children is important now more than ever.

Active learning (or "movement integration") is an innovative method of teaching which incorporates physical activity within academic lessons. The past 5 years have seen the development of several Active lesson interventions developed by public health researchers that include either short activity breaks (often referred to as 'fitness breaks' or 'energizers'), longer duration activity breaks that incorporate academic content through part of a lesson, or whole physically active academic lessons that deliver curriculum content through activity/movement. While preliminary evidence suggests that active lessons may enhance educational outcomes, there is a notable lack of a) evaluation of real world, grass roots interventions b) research from a mathematics learning perspective c) a focus on for whom, why and how changes occur (or do not occur).

In collaboration with Teach Active, the successful candidate will design a series of research studies to address these gaps and enhance our understanding of the role of active lessons on mathematics learning. Studies could include a literature review, an experimental study and/or an evaluation of an Active lessons programme.

The successful candidate will be supervised by a collaborative, multidisciplinary supervisory team across two funded research centres The Centre for Lifestyle and Medicine and Behaviour (CLIMB) <https://www.lboro.ac.uk/research/climb/> and The Centre for Mathematical Cognition <https://www.lboro.ac.uk/research/cmc/> at Loughborough University. Each year the successful

candidate will have a placement with Teach Active, an award-winning UK company that offers Mathematics and English active learning packages for UK primary schools.

Candidates should have a degree in sports-science, psychology, education, mathematics, or a related subject, and have a strong interest in public health and the psychology of learning. Candidates without a research-methods Masters degree will be eligible for a 1+3 award, the first year of which consists of a Masters in Social Science Research.

Application Process

To be considered for this PhD, please complete the Collaborative Studentship application form [available online here](#). Shortlisted applicants will also be required to provide transcripts and two references.

Application deadline: 28th Feb 2023, 5pm

Midlands Graduate School ESRC DTP

Our ESRC studentships cover fees at the home rate, a maintenance stipend, and extensive support for research training, as well as research activity support grants. Support is available to both home and international applicants. For further details, visit: www.mgsdtp.ac.uk/studentships/eligibility/.

Informal enquiries about the research or ***School of Sport, Exercise and Health Sciences*** and/or the **Department of Mathematical Education** prior to application can be directed to [***i.b.sherar@lboro.ac.uk***](mailto:i.b.sherar@lboro.ac.uk) and/or [***i.xenidou-dervou@lboro.ac.uk***](mailto:i.xenidou-dervou@lboro.ac.uk)