



Research project on supporting students' mathematical explanations

About this research project

You are being invited to take part in a research project. The research is being conducted by Loughborough University (Colin Foster, Matthew Inglis, Beth Woollacott) and UCL (Sam Sims).

It is up to you whether you participate in this research project. You are not obligated to take part as part of your teacher training. Before you decide whether to take part, it is important for you to understand why the research is being done and what participation will involve.

The research project aims to investigate the best way of supporting maths teachers to elicit explanations from maths students.

The findings from this research should help providers improve the way that they design and deliver teacher training in future.

This project has received ethical approval from the UCL Institute of Education Ethics Committee – approval number REC2218.

What would be involved in taking part?

Taking part in the research will take about half an hour of your time. You will spend about half of this time receiving training on some specific teaching techniques. This training will involve reading about these teaching techniques and practising using them. Some of this practice will take place in a simulated classroom. We will explain how the simulator works before you use it. The training and practice will take place on a Zoom video call which will be recorded. This video data will only be used for analysis by the research team and will not be shared with anyone else. The research team will also collect questionnaire data from you pertaining to your demographic characteristics.

By taking part in this research, you can contribute to improving the way in which teacher training is designed and delivered. We will also provide you with a £25 Amazon voucher (via email) as a thank you for your participation in the experiment. You will receive this voucher if you begin to participate in the experiment.

This research is not an assessment and will not be used to assess your performance on your initial teacher training course.

A potential risk in all research projects is data security. Our research team is minimising this risk by encrypting all the data that we collect. The data will be pseudonymised after the analysis is completed.

Neither you, your school, or your pupils will be identified in any public research outputs.

GDPR Privacy Notice

Loughborough University will collect your name and email address so that we can send your voucher for taking part. Loughborough University will also capture audio and video data. This means Loughborough University is collecting personal data.

UCL will not access any personal data as part of this project. UCL will only access fully anonymised data, after all meaningful identifiers have been removed.

Loughborough University will be the data controller for this project.

Under the UK General Data Protection Regulation (UK GDPR), the lawful bases Loughborough is relying on for processing the data is public task.

The General Data Protection Regulation grants people certain rights with respect to their personal data. These are: the right to be informed, the right of access, the right to rectification, the right to erasure, the right to restrict processing, the right to data portability, the right to object, rights in relation to automated decision making and profiling. If you object, then we will not use your data in this research project. For information about all your rights under the General Data Protection regulation, including your right to lodge a complaint with the Information Commissioners Office, see here: <https://ico.org.uk/for-organisations/uk-gdpr-guidance-and-resources/individual-rights/>.

You can contact the data protection officer at Loughborough university at dp@lboro.ac.uk. You can find more information about the Loughborough data protection policy here: <https://www.lboro.ac.uk/data-privacy/collecting-using/dataprotectionpolicy/>.

You can contact the data protection officer at UCL at data-protection@ucl.ac.uk. You can find more information about the UCL data protection policy here: <https://www.ucl.ac.uk/staff/policies/2024/jul/data-protection-policy>

The audio and video data will be deleted once the videos have been coded. The email addresses will be deleted once the vouchers have been distributed. In both cases, this will be no later than 1st March 2026. In line with UCL policy, the remaining data will be kept for 10 years and then securely deleted.

You are not under a statutory or contractual obligation to provide data.

The UCL Data Protection Number for this project is: 6364106/2025/07/52

Consent to participate

Thank you for reading this information sheet and for considering taking part in this research. If you have any concerns or questions, please contact Colin Foster by email at c.foster@lboro.ac.uk. You may keep a copy of this information sheet for your records.

If you do decide to participate, you remain free to withdraw at any time. If you would like to withdraw from the project at any point, please contact Colin Foster by email at c.foster@lboro.ac.uk.

If you consent to participate, please tick the following two boxes:

I have read and understood this consent form: ☐

I consent to take part in the research project described above: ☐
