



LIVERPOOL JOHN MOORES UNIVERSITY

Parental Information Sheet

LJMU's Research Ethics Committee Approval Reference:

YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET

Learning by Questions: What is the impact on pupil achievement in maths and attitude towards learning maths?

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Your child is being invited to take part in a research study. Before you decide it is important for you to understand why the study is being done and what participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

1. What is the purpose of the study?

Learning by Questions (LbQ) is a maths teaching approach used in primary schools that combines technology with mastery learning. The primary school attended by your child has agreed to work with Liverpool John Moores University to help evaluate the LbQ approach in Year 5 pupils. Not all schools will be using the LbQ approach. Some schools will use the LbQ approach and others will continue to use their existing approach to teaching maths. This will enable us to compare schools who do and do not use the LbQ approach.

This study hopes to answer the following questions:

- Does the LbQ approach impact on maths learning in Year 5 pupils?
- Does the LbQ approach impact on Year 5 pupils' attitudes to learning maths?
- What are the Year 5 teachers' perceptions of using the LbQ approach?

2. Why has your child been invited to participate?

We are inviting all Year 5 children in the schools who have agreed to help with the evaluation to participate in this study.

3. Does your child have to take part?

No. It is up to you and them to decide whether or not to take part. You can withdraw your child's participation at any time by informing the school office without giving a reason and without it affecting any aspect of your child's education at school or relationship with the school.

4. What will happen to your child if they part?

Children will take a 30 minute survey about their attitude to learning maths and a 40 minute maths test once in December 2018 and again in May 2019. The survey and maths test will take place in normal lesson time at school and will be administered by the Year 5 teacher.

We will also ask four children in some schools to participate in a 20 minute group discussion about their experiences of learning maths. This discussion will be undertaken by an LJMU researcher and will take place on school premises during the school day.

In addition to asking for your consent for your child to participate, children will also be asked verbally before each maths test and survey, and also before the discussion, whether they agree to participate.

5. Will the discussion be recorded and how will the recorded media be used?

Audio recordings will be made of the discussion about pupils' experiences of learning maths. These will be used only for analysis and to illustrate points about maths learning in a report provided to the LbQ team and the educational community more widely. No other use will be made of them without your written permission, and no-one outside the project will be allowed access to the original recordings.

Interviews will be audio recorded on a password protected audio recording device and as soon as possible the recording will be transferred to secure storage and deleted from the recording device.

6. What are the possible disadvantages and risks of taking part?

There are no foreseeable risks or disadvantages to pupils for participating in this study. Survey questions were chosen from those previously used with primary school aged children and so do not ask for sensitive or invasive questions. We have also minimised the number of questions that we will ask during the survey so that pupils' lessons are not disrupted. Examples include:

- "I can learn things quickly in maths lessons"
- "If I get a maths question wrong, I can work out why I went wrong"
- "I am interested in learning maths"
- "I want to show how good I am at maths"

The discussion will follow the same approach. The types of questions we will ask in the discussions with pupils include:

- Could you give me an example of lesson you enjoyed/disliked that used the LbQ approach?
- How has LbQ influenced your maths work?
- Has LbQ helped you in any other ways?
- Could you summarise the impact that LbQ has had on you?

The questions in the maths tests will be made up of questions from the 2016, 2017, and 2018, National Curriculum Test (often referred to as SATs) papers. Although these papers contain questions that cover learning in both Year 5 and Year 6, we will only use those questions that are appropriate for Year 5 children. The two National Curriculum Test Reasoning papers are 40 minutes each and so we made the test used in this study 40 minutes long.

7. What are the possible benefits of taking part?

We do not know at the outset if LbQ will enhance maths learning or attitudes towards maths learning. However, if it does provide beneficial we hope that this study will be able to inform schools whether to adopt this approach in the future.

8. What will happen to the data provided and how will my child taking part in this project be kept confidential?

We will ask your child for some background information in survey of attitudes towards maths learning. This will include whether they are a boy or girl, their age, and their ethnic background. We will not ask for their name and no child will be identifiable from these data. We will link up the results from the two maths tests and surveys by asking pupils to make up a code.

In the discussions with pupils about their learning, it will be necessary for the researcher leading the group discussion to address pupils by their name. The researcher will only ask for the pupil's first name. In the event that it would be useful to reproduce a quotation from a student in the report to the LbQ team (or when reporting findings to the educational community) we will not use the pupil's name or which school they were from. At the beginning of the group discussion we will ask pupils to make up a name and we will use these pseudonyms, where necessary, during the reporting of findings. In this way, the pupils who participate in the group discussions will also remain anonymous.

9. Limits to confidentiality

The Investigator will keep confidential anything they learn or observe related to illegal activity unless related to a child safeguarding issue.

Bearing in mind that the discussion within the focus group takes place with the researcher and a group of four children there is the potential for participants to share the views of others. It will be made clear, during the consideration of ethics prior to each group discussion, that each individual should act ethically and guarantee that 'what is discussed by group should stay within the confines of the group'.

10. What will happen to the results of the research project?

A detailed report of findings will be prepared for the LbQ team and a shorter report for participating schools. We will also present findings to the educational community. This might be through a poster or presentation at a conference or a written journal article.

11. Who is organising and commissioning the study?

The study was commissioned by the Learning by Questions team who will be responsible for training and supporting teachers in the LbQ approach. Liverpool John Moores University was commissioned to independently evaluate the effect of LbQ. There is no commercial or financial gain for Liverpool John Moores University

12. Who has reviewed this study?

This study has been reviewed by, and received ethics clearance through, the Liverpool John Moores University Research Ethics Committee (Reference number: ECH/ 2018/029).

13. What if something goes wrong?

If you have a concern about any aspect of this study, please contact the relevant investigator who will do their best to answer your query. The researcher should acknowledge your concern within 10 working days and give you an indication of how they intend to deal with it. If you wish to make a complaint, please contact the chair of the Liverpool John Moores University Research Ethics Committee (researchethics@ljmu.ac.uk) and your communication will be re-directed to an independent person as appropriate.

14. Data Protection Notice

The data controller for this study will be Liverpool John Moores University (LJMU). The LJMU Data Protection Office provides oversight of LJMU activities involving the processing of personal data, and can be contacted at secretariat@ljmu.ac.uk. This means that we are responsible for looking after your information and using it properly. LJMU's Data Protection Officer can also be contacted at secretariat@ljmu.ac.uk. The University will process your personal data for the purpose of research. Research is a task that we perform in the public interest.

Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained.

You can find out more about how we use your information by contacting secretariat@ljmu.ac.uk.

If you are concerned about how your personal data is being processed, please contact LJMU in the first instance at secretariat@ljmu.ac.uk. If you remain unsatisfied, you may wish to contact the Information Commissioner's Office (ICO). Contact details, and details of data subject rights, are available on the ICO website at: <https://ico.org.uk/for-organisations/data-protection-reform/overview-of-the-gdpr/individuals-rights/>

15. Contact for further information

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Thank you for reading this information sheet and for considering to take part in this study.
