



## PARENT'S INFORMATION SHEET & CONSENT FORM

Title of Study: Trialling strategies for maths word problem solving in children with developmental language disorder (DLD)

Researcher: Nicola Dawson, Susan Ebbels, Hilary Nicoll, Chris Mitchell, Sander Palmqvist, Sian Smith, Helena Osana, Anne Lafay

Project Number: 2023/4

### What is the purpose of this study?

The study will involve Moor House School & College students across all year groups. The purpose of the study is to identify the most effective methods for supporting students' understanding of maths word problems. Maths word problems are common in materials used for teaching and assessing maths ability and are among the most challenging problem type that children encounter. This is because students have to understand the language of word problems in order to carry out the relevant calculation. Word problems may be particularly difficult for students with developmental language disorder (DLD) because they often include irrelevant contextual or numerical information, and involve complex sentence structures and vocabulary. The students taking part in this study will complete a short arithmetic task and 12 maths word problems which will be modified to support their understanding. These simplifications will involve: a) removing irrelevant contextual information; b) simplifying sentence structures; c) removing irrelevant numerical information. This will allow investigation of which types of word problems students find most difficult, and which types of modification are most helpful.

### What will the study involve?

Students will complete a short, 12-item arithmetic task in maths class during Summer 2024. Most students have already completed this in class. During Autumn and Spring terms 2024-25, they will then attend a single session of approximately 30 minutes to complete all 12 maths word problems. This will take place in the Moor House Research and Training Institute on the school site. Word problems will be presented in written format on a computer screen and will also be read aloud to students. Students will be asked to solve the problem and will be provided with the relevant simplifications to assist them.

### What is the aim of the study?

Our aim is to better understand which aspects of maths word problems students find particularly challenging, and to identify which simplification strategies are most effective in supporting their understanding.

All information in this study will be treated as strictly private and confidential. Your child's name and other identifying information will not be used on any documents which are not kept in your child's therapy file or which may be shared outside the school, in order for their identity to remain anonymous.

**If you are happy for your child to participate in this project, you do not need to do anything.**





**If you would NOT like your child to be involved in the project, please contact us as outlined below.**

It is important that you know that your child is free to withdraw from this study at any time, without giving reason. Withdrawal from this study will not affect your child's usual speech and language therapy provision.

If you would like to ask any questions or find more information about this therapy study, please feel free to contact me either via email: [dawsonn@moorhouseschool.co.uk](mailto:dawsonn@moorhouseschool.co.uk) or via the main school phone number.

***If you would like to opt-out from this study, please contact Nicola Dawson at [dawsonn@moorhouseschool.co.uk](mailto:dawsonn@moorhouseschool.co.uk) with the following information:***

Name of child: [please complete]

Name of research project: Trialling strategies for maths word problem solving in children with developmental language disorder (DLD)

Opt-out statement: I do not want my child to participate in this project

Parent/guardian name: [please complete]

Date: [please complete]

If we have not heard from you by Wednesday 25<sup>th</sup> September, we will assume that you are happy for your child to be included in the project (although you may request that we remove their data at a later time).

***Note that if you are happy for your child to participate in this project, you do not need to do anything.*** Thank you for your support.

