REMOVING BARRIERS FROM THE MATHS CURRICULUM

Strategies to remove potential barriers in the curriculum

Subject: Maths

Potential Barrier	Adaptations to Teaching
Difficulty with vocabulary and its various synonyms	● Pre-teach key vocabulary, then ensure multiple and regular exposure to these words. ● Display key vocabulary for each lesson ● Use widgets alongside vocabulary ● Teacher read the vocabulary, children to repeat ● Display vocabulary on the working wall to refer back to alongside the corresponding widgets
Difficulty reading	● Teacher and TA to read information for the child ● Partner with a child who can read key information to them ● Work in a smaller group ● Use widgets to reduce word level
Difficulty recording	● Teacher to support on whiteboards ● Widgets to support recording ● Flashcards to aid with number formation ● Adaptations to resources – size of square, pencil
Insecure fact knowledge – number bonds, times tables	● Retrieval practice daily as lesson starter – up to three sticky questions per lesson ● Repetition for fluency during pre or post teaching session ● Knowledge mats – times tables/ number bonds etc ● Manipulatives to support number facts
Needing extra time to process questions	● Always allow for plenty of thinking/talking/practise time before asking children to comment or do ● Carefully select talk partners to assist in the think/pair/ share ● I do/ we do/ you do allows for clear scaffolds ● Small steps learning – break planning down into clear small steps to reduce cognitive load ● Reduce teacher talk – implement key findings from DLD training

Sequential procedures	● Give next steps for success – written, verbal or visual – to remind children what to do next. ● Repeat these types of questions in maths alongside the children's next steps ● Plan for additional questioning (additional to) to deepen and secure understanding ● Refer to NCETM and the planned Dong Nao Jin
Loss of concentration on a difficult task	● Growth Mindset approach across the school. ● Encourage use of manipulatives to solve a problem ● Time is given to implement strategies to gain procedural knowledge ● Scaffolds provided to support ● Mini plenaries to break up learning and check for understanding ● Ensuring learning has been planned in small steps to reduce cognitive load

Additional strategies

- Check understanding through careful questioning – allow for partner talk, quiet thinking time and written example
- Introduce each topic with key language and skills needed