How can we develop the ability of pupils from under-resourced backgrounds to convince and prove orally, ensuring sustained impact, through developing teacher knowledge?

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MATHSHUBS ORIGIN

What we've noticed

Many primary school teachers do not understand the place of proof in the maths curriculum and so do not provide these opportunities.

Participants did expect children to prove thinking in other subjects (eg reading) but were unsure how to do this in maths.

When teachers used a 'convincing framework' for oracy (Mason, Burton and Stacey, 1982), pupils were able to prove their thinking and challenge each other's ideas.

Children need to be secure in the maths they are reasoning with (including key vocabulary), to reduce cognitive load.

Why we think this is significant

Teachers saw that their focus children can progress in reasoning, when they are **taught** to prove and when teachers **know what to look for** in children's oral explanations by using a reasoning scale.

All children, regardless of age or prior attainment, can prove orally when reasoning activities are based on secure maths knowledge and vocabulary.

What Does Proof look like in the Primary Classroom? (Guidance leaflet produced by participants)
Participants' impact statements

Next steps

Embed use of the convincing framework and reasoning scale in our own classrooms and schools.

Impact on other schools through collaboration and partnership: school level; trust / academy level; maths hub level.

Share our leaflet!

NB New research question was to be decided with participants in June, but this will now be agreed with LLME participants next year (due to change in RIWG structure).