

Using online tuition to improve mathematical reasoning and give one to one feedback to pupils outside of the classroom

Thorntree Primary School

Maths Lead and Assistant Head



Location:

Middlesborough, North Yorkshire



School Size:

300+



Intervention Type:

KS2 SATs Intervention



Target Pupils:

Pupil Premium pupils in Year 5-6 below ARE

Thorntree Primary wanted their Year 6 children to have the opportunity to work on their reasoning skills and get one to one interaction and feedback, but didn't have enough staff to give that level of attention in a class of 25 pupils. Using Third Space Learning, they were able to provide 10 pupils with individual discussion and guidance from a tutor each week to improve their reasoning skills whilst requiring only one school staff member to supervise.

Our focus from the start was improving reasoning skills

Our children were stronger in arithmetic and fluency but not so much in reasoning, and we wanted something where they could have that conversation about maths with their own tutor one to one. We felt like developing the accuracy skills and being able to articulate their responses would be beneficial to their mathematical knowledge, but we didn't have the capacity in school to have 10 adults tutoring 10 children, so we felt that this was the option to take. It's bespoke so they get instant feedback. They would be waiting a while in class.

We have found that pupil confidence has also grown

The most important thing is that it's changing attitudes to maths. There's always an idea that it's hard, it can't be engaging, it can't be fun. Our mission in school is to put the enjoyment back into maths. So to see the children actually enjoying it, that was the main thing to start with. And the interface isn't threatening. It's not maths as we know it. There's a bit of wow factor around it. The content is delivered in a way that they can do a little bit and then have a bit of discussion. That takes away the intimidation with maths. We noticed in the classroom that these children were able to articulate their maths much better than the other children. When we're having our Pupil Progress meetings we would discuss the impact and if we needed to change children, based on who was/wasn't benefitting/engaging. The vast majority don't want to be taken off the programme, and the ones who aren't using Third Space want to be on it.

This confidence has been clear in the classroom

Then we drilled down into the impact it was having. We looked at the differences in the performance in the classroom of those receiving it and those who weren't. We triangulated it with books, assessment data and the teachers perceptions of the children in the classroom. The teachers who have them in the class can notice the differences with them.

It secured their knowledge of concepts, in terms of the basics and tracking that back in terms of how it progresses through the Key Stage. It's allowed us to identify the things we need to re-cover in class based on the PSQs or the feedback we get from the reports.

The assessment data has been helpful in planning lessons

The Diagnostic assessment diagnosed some areas of need for the children that we didn't necessarily anticipate. We could then cross-reference that with what we were seeing in the classroom. It shows the gaps and where they're working at, and the progression of where we should be tracking back from, so if they're in Year 5 and they have a gap in Year 3 we can see what that objective was and deal with it.

We were able to feed that back into our own progression in school and how we've mapped maths out in class. It's encouraging staff to think in terms of backwards steps and backwards planning, and think 'What would have come before if they haven't got it now?' and 'Where could we have plugged these gaps earlier?'

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It's directed towards their academic ability all of the time so they can access and engage in it and be pushed forward with it. It's holding their attention because it's interactive and they enjoy it. And it challenges them to think and get better.”