



Excellent Maths Teacher Programme Case Study

Study 2 – Rachel Hulley, St Theresa’s Roman Catholic Primary School, St Helens

“It’s the best CPD I’ve been on in the 10 years since I started training to teach. It reignited the fire in my belly for what I had the potential to do in maths.”

Context

St Theresa’s RC Primary School has 241 pupils, of whom 39% qualify for Pupil Premium. There are 7 Teachers and 17 Teaching Assistants.

Interviewee – quoted in italics

Rachel Hulley, Joint Maths Coordinator and Year 2 class teacher

Background

Rachel, who has a degree in Primary Teaching with Maths, was invited to be part of the first cohort of the North West Maths Hub 3 Excellent Maths Teacher Programme (EMTP) by Lisa Bradshaw (Director of St Helens TSA and NW Maths Hub 3 Lead). At the time Rachel was in her third year of teaching, with no additional responsibilities.

Lisa had visited the school in Rachel’s first year of teaching, when the Headteacher was new and seeking advice. She looked at books, saw how the school was teaching maths and suggested improvements that could be made. Maths had always been quite strong at St Theresa’s, but with the advent of the new curriculum in 2014 there was a realisation that there were gaps which the Y6 teacher was having to do a lot of work to cover, in order for the results to stay the same. Teachers knew that this needed addressing.

The Programme

The programme consists of seven full day sessions in one school year, aimed at excellent maths teachers, subject leaders, Specialists Leaders of Education and Professional Development Leads, who have the potential and drive to achieve excellence in maths practice and the ability to develop others.

Initially Rachel felt that, as a class teacher, unlike most of the other participants, she wasn't able to return to her school and change things. However, she thought about what she would do if she were in a position to do so. Gradually she had the confidence to share with the Maths Coordinator what she had learned and, following the third session, she led a staff meeting based on what she had seen and what she thought they could try at St Theresa's. During the course of the programme she became part of the Maths Coordination Team in school and she now shares the role of Maths Subject Leader.

The programme was completely different to anything she had experienced before. She felt that after a while she was beginning to think how the Course Leader was thinking.

"This wasn't just a resource that we were being given. It was the thinking behind what she was doing that mattered. Why she was asking questions of the children. I knew there were teachers in school for whom maths was their weakest subject. I knew that I needed to help them to think about why we were doing certain things, why we were asking children to do things."

Every day of the course each participant had to take with them maths books from a different year group. Because Rachel wasn't involved in book scrutinies at school, this was really helpful for her. They all took photos of each other's books, so Rachel would return to school with pictures to show staff what other schools were doing. There was a realisation among the course participants of what good practice looks like and how they might help other teachers to improve their teaching.

"Looking at a range of books you can't help but make comparisons. People were open even if they didn't feel that the books they had brought showed good practice. Those conversations helped me to develop professionally. The course leader suggested that you could use one of the examples and adapt it for the whole school. We continue to do that. Whenever we see something good we take it to a staff meeting and share it so that everyone can take it away and adapt it for their year group. But we always ask ourselves – why are we doing this? What's the learning that comes before it?"

St Theresa's Headteacher has invested heavily in high quality professional development for her staff. The other Joint Maths Subject Leader has now also been on the EMTP and all staff have accessed appropriate year group training. Pupils are told that there's a maths golden thread throughout the year group and throughout the school. Teachers are more consistent in their teaching and this can be seen in children's books.

"As a staff we've been on a journey, but the children are on a journey too. That journey starts in EYFS so we ensure that the Y6 teacher is the icing on the cake. Everything the children learn along the way helps them to reach their expected level in Y6."

Are these the outcomes you expected from the Excellent Maths Teacher Programme?

"Initially I didn't know what to expect but I didn't think I would be where I am now. The programme gave me an enthusiasm for maths and leadership. I was at the beginning of my career and a lot of the other teachers were much more experienced than me. I noticed that I gained confidence to share what was

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happening in school. I made professional relationships that I didn't expect to make. I still see some of the people from that course, including someone from a different local authority who teaches the same year group as me. We're facing similar problems and we're still talking 4 years later. As a group we met seven times in a year, so we really got to know each other and that's why we were so open with each other.

As a result of all of this I became the school's Joint Maths Subject Leader and a Specialist Leader in Education (SLE). The programme gave me confidence that what I was experiencing I could take to other schools. The things I have been involved in as an SLE have been incredible. I would never have thought that these things would all come out of that programme."

"Before the EMTP, I was the teacher and they were the children and I was going to teach them. Now I have the confidence to ask questions in maths that make children think and the children have the confidence to tackle problems with enthusiasm. The children work harder than I do now. When teachers from other schools observe me teach they are often amazed by the conversations that go on in the classroom. I don't just accept it when they tell me the answer. I want to know their reasoning. The whole class can be in a dialogue about maths. This doesn't happen overnight. It's got to be worked on from Early Years, in every classroom."

"At the outset I was consumed by the curriculum in Years 4 and 5, where I had taught. I didn't have an overview of the whole curriculum and how it all fitted together. This was the first time that I appreciated the importance, for example, of what we were doing in Early Years and the bigger picture across the whole school. I don't know how I would have learned what was going on in the other year groups otherwise, as I wasn't a Coordinator."

What Next?

"This year we have been involved in the Teaching for Mastery Group with the Maths Hub, so that our knowledge of the subject grows. With six meetings over the year, it's another forum for open dialogue. We watch teachers teach and then have a discussion about what makes good practice."

"I can't put into words what it was like to be part of the programme; to meet like-minded people. There were twenty other professionals there who all wanted to talk about maths. Everyone was willing to share their practice, show books and be involved in an open discussion with no judgement. No-one was afraid to say what they were thinking."

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Appendix 1 Pupil Voice

What do children at St Theresa's think of their maths learning?

(Responses range from Reception to year 6)

"I'm really good at Maths."

"I love learning about number especially fractions."

"Maths in school helps me when I go to the shops with my Mum."

"I love looking for patterns."

"I know maths is really important in real life situations."

"I love lessons which connect all our learning or even make us think back to what we learnt in the year before."

"I love problem solving – when I really have to think."

"Maths helps energize my brain"

"Maths has brought out my talent."

"The teachers are always helping us to improve."

"I love that there is always something new to learn."

"I want to be an astrophysicist when I grow up and so maths is very important for my future."

"Maths lesson go very quickly."

"There is always challenge in every maths lessons."

"I can count to 100 but it would take me all morning!"

Appendix 2 Outcomes

Key Stage 1 2016, 2017

Maths- Attainment

	2016 Expected Standard	2016 Greater Depth	2017 Expected Standard	2017 Greater Depth
All Pupils	63%	7%	80%	20%
Disadvantaged	50%	0%	75%	25%
Non- disadvantaged	75%	13%	82%	75%
Females	60%	0%	82%	12%
Males	67%	13%	77%	31%
SEN	33%	0%	40%	0%
More able	100%	75%	100%	71%

Maths- Progress

	2016 Expected Standard	2016 Greater Depth	2017 Expected Standard	2017 Greater Depth
Emerging	17%	0%	50%	0%
Expected	94%	11%	92%	8%
Exceeding	0%	0%	100%	71%

Key Stage 1 2018

End of KS1

Subject	National	School
Reading	76%	80% +4%
Writing	70%	70%
Maths	76%	80% +4%
Combined	65%	63% -2%

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Key Stage 2 2016, 2017

Maths- Attainment

	2016 Expected Standard	2016 Greater Depth	2017 Expected Standard	2017 Expected Standard 2 disapplied children removed	2017 Greater Depth	2017 Greater Depth 2 disapplied children removed	National 2017
All Pupils	90%	23%	83%	89%	30%	32%	75%
Disadvantaged	83%	0%	92%	92%	25%	25%	
Non- disadvantaged	95%	37%	78%	88%	33%	38%	
Females	94%	25%	70%	70%	30%	30%	
Males	87%	20%	80%	89%	30%	33%	
SEN	75%	0%	58%	70%	8%	10%	
More able PP			100%	100%	33%	33%	

Key Stage 2 2018

Subject	National	School
Reading	64%	79% + 15%
Writing	78%	75% -3%
Maths	76%	86% +10%
Spag	78%	79% +1%
Combined	64%	75% + 11%
Scaled Scores		
Subject	National	School
Reading	105	104 -1
Maths	104	105 +1
Spag	106	107 +1

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