# ‘A shared vision, a workable strategy and a passion for maths’: A case study of how Teaching for Mastery is Sustained at Woolheart School

## Area of interest

This visit took place as part of the NCETM’s ‘Evaluator in Residence’ initiative. The visit gathered evidence towards the Primary Strategic Goal with an overall research question, ‘How do the Teaching for Mastery Sustaining Work Groups support lasting change in schools?’.

## About the school

Woolheart School is a small primary school situated in rural Sussex. The school currently has a year R class, mixed years 1-2 and 3-4, a year 5 class and a year 6 class. The school a has lower than average proportion of pupils who require SEN support, speak English as an additional language, or are eligible for free school meals. In 2019 pupils in the school made average progress in reading, writing and maths following a significant dip in writing and maths progress in 2018.

The school received a ‘Good’ Ofsted rating in 2019. In the report the headteacher was praised for their leadership, and the school’s middle leaders were new to role thus were not yet fully involved in assessing the impact of their work. The report highlighted that children were not deepening their maths knowledge using reasoning, and that higher attaining students were not being challenged.

The school was chosen by the Maths Hub Lead and the Assistant Maths Hub Lead as an example of a school that was part of the Sustaining Work Group and had high levels of engagement with Maths Hub Activity.

## About the visit

An evaluation lead from the NCETM visited the school in the morning February 2023 with the Assistant Maths Hub Lead for Primary. They were warmly received by the Headteacher and Maths Lead, who worked with the visitors all morning. During the visit the team saw maths teaching (including a Mastering Number session) in all classes except years 1-2, spoke extensively with leadership and had the opportunity to look at curriculum planning and pupils’ maths books.

## About Woolheart’s engagement with the Maths Hub and Teaching for Mastery

The Maths Lead, who is the Year 6 teacher, started in role in September 2019. Woolheart immediately engaged with their local Maths Hub and joined the Teaching for Mastery Developing Work Group that year, focusing on Year 6 and Years 3-4. The school is now in its second year of the Sustaining programme. Year R and Years 1-2 also teach Mastering Number. The Maths Lead trained as a Mastery Specialist in 2020-21 and now leads (separate) Developing, Embedding and Sustaining Work Groups. The EYFS (Year R) teacher is a Mastering Number cohort lead, training as a PD lead and will begin Mastery Specialist Training in September 2024. The school is also part of a spatial reasoning Research and Innovation Work Group (RIWG) and leads a ‘New and Aspiring Maths Leads’ RIWG.

## Mathematics in Woolheart school 2019-23

### 2019-20 Early developments: from a scheme to the spines

In 2019 Woolheart’s immediate plan was to develop reasoning and challenge for the higher attaining students, as per Ofsted’s recommendations. The Maths Lead saw the potential in the White Rose maths scheme, but during the year, identified that the planned learning steps were too big and that children needed to spend more time on concepts to deepen understanding. Pupils also needed to talk about their thinking and secure their reasoning skills. The Maths Lead started using the NCETM curriculum prioritisation materials to create a bespoke scheme for her own class, and invited colleagues to observe the learning in her classroom and to use the spines in their own curriculum planning. The difficulties colleagues had in using the spines to plan effective, coherent schemes identified that staff needed to develop their subject knowledge in mathematics.

### 2020-22 COVID, challenges and taking risks

In the 2020-21 autumn term the Maths Lead started to develop Teaching for Mastery in all classes, with professional development focusing on lesson design and variation. When the school moved to online learning during the pandemic, the maths lead adapted her professional development plans. Teachers and their Teaching Assistants (TAs) taught a daily live online lesson maintaining the ‘ping-pong’ Teaching for Mastery pedagogy, with the teachers leading the lesson and the TA monitoring the chat. The school bought access to ‘Power Maths’ which provided the lesson resources and the student activities. When not directly teaching, staff watched each other online and had daily maths meetings. Teachers and TAs grew in knowledge and confidence as they engaged in professional discussions about each other’s approaches. Teachers commented that the slower pace and mastery approaches allowed all students to ‘get it’.

### 2022 and beyond: Making time not marking time

Once normal teaching resumed, the focus again became developing a bespoke small-steps curriculum in all classes. The Maths Lead and Headteacher realised that developing teachers’ knowledge and a new curriculum would be time consuming, so before beginning this approach the marking policy was radically changed. Teachers and TAs were trained on ‘in the moment’ assessment, and teachers were expected to use PPA time to ‘P and P’ rather than ‘A’. All teachers use the spines and the Ready to Progress criteria to plan coherent sequences of learning. Teachers, TAs and ECTs have attended the relevant SKTM programme for their specific development needs. Additional to the Teaching for Mastery approaches, the school adopted a specific taxonomy and carefully planned questions to secure and deepen understanding, including for the higher-attaining children. Use of ‘Seesaw’ software and reflection question reduced the need for pupils to evidence their maths work in their books.

## Evaluator’s reflections

After spending a morning in the school, the evaluator identified six themes that have enabled Teaching for Mastery to be sustained in Woolheart.

### Senior Leadership support, especially in the Embedding Year was a catalyst for a change in culture.

The Maths Lead and Head Teacher agreed that the major factor in the success of Teaching for Mastery is the emphasis on developing a school culture, with most of this happening in the ‘Embedding’ stage. They believe that one staff member (be it the Maths Lead, a specialist, or other teacher) could only instigate change with the support of senior leadership. Woolheart School used Ofsted’s recommendations to shape a school vision for mathematics and led the same vision activity with all stakeholders (including governors, parents, and students). Both the Head Teacher and the Maths Lead promote staff collaboration and the development of a shared vision in their work as a specialist and head teacher advocate.

### It was important to decrease the teachers’ workload in another area (in this case, marking) to free up time for staff development.

In Woolheart School, the marking policy was completely overhauled and a new policy introduced before teachers were asked to spend additional time developing their maths curriculum and pedagogy.

### Developing and rewarding Teaching Assistants was a vital element in sustaining Teaching for Mastery.

The Head Teacher explained that teachers are able to have time out of classes because all TAs have developed their subject knowledge, and work as a team with their teachers. All TAs can cover PPA time and are paid at a higher rate. TAs attend the SKTM programme and are trained to live-mark pupils work, seeking advice where necessary. TAs have bespoke release time to look at curriculum planning, and most TAs take up the opportunity to join maths planning meetings.

### A small school with mixed-age classes can successfully adapt the Teaching for Mastery approach for mixed-age classes.

The mixed age class teams do their small-steps planning with the principle that the whole-class teaching takes place with both year groups where possible. Where the lesson content is too different, the teacher and TA split their time so that the teacher leads the whole class teaching with one year group whilst the TA supervises independent working with the other. Gaps have been identified in the mathematical understanding of the year 3-4 class, so the teachers are working on how the Year 2 Mastering Number sessions could be used in this class.

### A Sustaining school can strategically use their Specialist, Head Teacher Advocate, and school site, to sustain their own development and bring in funding.

The Maths Lead, a trained specialist, is the Work Group Lead for a Developing, Embedding and Sustaining Work group, and sessions take place on the school site. The location of the Maths Lead’s classroom changed to allow easier access for visiting teachers. School staff can easily attend Work Group sessions with minimum disruption, and the headteacher believes having an open classroom approach and a culture of visitors improves practice. Woolheart School is also developing the leadership skills of their teachers through leading the New and Aspiring Maths Leads RIWG, and developing the EYFS teacher as a Mastering Number lead and a future Teaching for Mastery Specialist. The Head Teacher also undertakes work for the Maths Hub as a Head Teacher Advocate.

### Careful, short-term use of a prepared scheme can be a useful temporary framework as staff develop their Teaching for Mastery knowledge and pedagogy.

The Maths Lead spoke positively about how White Rose and Power Maths were a ‘safety net’ for less confident staff: they could use the resources confident that they were compatible with a Teaching for Mastery approach. The maths lead suggested that as teachers developed, they ‘naturally’ moved away from the schemes in favour of bespoke planning using the Ready to Progress criteria. However, she acknowledged that this was a ‘chicken and egg’ situation and that uncritical use of a scheme without a mastery approach meant that staff missed out on opportunities to develop deep understanding.

## Conclusion

The evaluator visiting Woolheart School saw lots of evidence of the impact of Teaching for Mastery. The school’s development has been led by the Head Teacher and the Maths Lead, who have a passion for maths, a clear vision, and a strategy for improvement. All three elements, and the interplay between them, appeared necessary for the reported development of mathematics within the school. The school has embraced several opportunities offered by the Maths Hub: Work Group participation, Specialist training, SKTM programmes and Work Group Leadership, maximising the short-term funding available and allowing all staff members to be involved in leading or supporting change. Once trained, the subsequent deployment of school and mathematics leadership to other schools in the hub sustains the school’s own development.