**Visits to Canterbury Academy**

**20/21 March 2023**

**27 June 2023**

**Area of interest**

This visit took place as part of the NCETM’s ‘Evaluator in Residence’ initiative. The visit gathered evidence towards the Secondary Strategic Goal with an overall research question,

*‘What evidence is there, over the longer term, of impact on student progress and outcomes, engagement, and on attitudes and engagement towards mathematics?’*

**Context**

The academy is a large secondary school situated in Kent. The school is non-selective but sits within an area served by grammar schools. It converted to an academy in 2012 and it is the lead school in a small multi academy trust.

It has a smaller proportion of high prior attaining pupils than average and provides a ‘grammar stream’ for the most able in Year 7-11. The lowest prior attaining pupils in Year 7, 8 and 9 are taught in nurture groups and start with the Year 4, 5 and 6 curriculum.

In 2022, Progress 8 for mathematics is -0.6 which is in line with the overall P8 figure 0f -0.57. In 2022, lower prior attaining pupils made stronger progress than other pupils, with higher prior attaining pupils typically making less progress.

The school received a ‘Good’ Ofsted grade in 2017 and had a subsequent inspection in February with the outcome not yet in the public domain during the first visit. The school was judged as ‘Requires Improvement’ by the time of the second visit.

The Head of Department (HoD) has been in post since April 2020 and leads a large department of 17 teachers. The department has an experienced KS4 Lead and has just appointed a new KS3 Lead who is primary trained. The HoD currently oversees KS5 provision. The department is fully staffed and there are a number of non-specialist teachers. A new Head of School has been appointed to start in September 2023 and she is a maths teacher who has done some work for the hub.

**About the visits**

An evaluation lead from the NCETM visited the school over two days in March 2023 and one day in June with the Assistant Maths Hub Lead for Quality Assurance and Evaluation. They were warmly received by the Head of Department who worked with the visitors during the entire visits. During the first visit, a variety of KS3 lessons were seen and there were extensive conversations with leadership including the line manager of the department. We also spoke to a small group of Year 7 lower prior attaining pupils. In June we focussed on the impact of the departmental PD plan that was being led of the Head of Department. To do this we talked to a wide cross section of teachers, visited lessons and met with Senior Leaders.

**Engagement with the Maths Hub and Teaching for Mastery**

The Head of Department is a Cohort 2 Secondary Mastery Specialist who is currently leading a Teaching for Mastery Sustaining Work Group for the hub. The school joined Teaching for Mastery Development in September 2020 with two advocates undertaking the development year continuing into the Embedding year. However, restrictions as a result of the Covid-19 pandemic impacted this.

**Evaluator’s reflection**

After spending time in the school, seven themes were identified that would warrant further consideration:

1. *Resonant cultures and ethos*

A culture of improvement through high quality collaboration underpins all Maths Hub programmes. It was apparent that this focus on collaboration is central to the HoD’s development strategy. She can clearly articulate a vision for the collaborative ethos and culture within the department. This is shared by the other members of the department that were talked to. It appears that meaningful professional collaboration is particularly important for the school because for 3 distinct factors:

* The size and geography of the department
* The number of non-specialists in the department
* The number of split classes

The interview with the line manager for maths clearly highlighted collaboration as a key vehicle for whole school improvement and that senior leadership are entirely supportive of this. This apparent resonance between the cultures and ethos of the Maths Hub, maths department and school gives a firm foundation for future improvements. All of this was echoed and strengthened by the second visit.

1. *Making further change manageable*

The HoD demonstrates a nuanced understanding of implementation and change management. This has been key to classroom improvements to date and is resulting in an improved understanding of teaching for mastery. The HoD has identified two key elements in making further change manageable and in strengthening collaborative culture:

* A tight and sustained pedagogical focus that every teacher uses, for example, questioning
* To discuss the key elements to great maths teaching at the academy and use this to produce an agreed lesson entitlement or charter

This [Essence of Mathematics Teaching for Mastery](https://www.ncetm.org.uk/teaching-for-mastery/mastery-explained/the-essence-of-mathematics-teaching-for-mastery/) document could support these elements. Having considered the impact of the PD programme on questioning, the constant focus over a significant period of time seems to have supported manageable change, doing less but doing it deeper and better is key to this.

1. *Growing leadership capacity as a catalyst for further change*

The HoD is a powerful advocate and role model for Teaching for Mastery. She provides strong and visionary leadership in continually wanting to improve the mathematics experience for pupils at the academy. Given the size and diversity of the department it appears clear that building leadership advocacy for teaching for mastery would support the HoD in further development. The appointment of a new KS3 Lead provides an opportunity to do this and care should be taken to link her with the appropriate Maths hub programmes to supplement in-school leadership development.

1. *Emerging TfM practice is having an impact (especially with lower prior attaining pupils)*

Classroom practice that was underpinned by teaching for mastery principles was seen, mostly with lower prior attaining pupils. Where this was strongest, a variety of manipulatives and representations were being used to support and deepen pupil understanding of place value. Careful questioning was also used to unpick and address pupil misconceptions. The lower prior attaining Year 7 pupils that were interviewed report that they feel they are making better progress in maths since joining the school. They value being part of a class rather than being removed from the class to work individually with a TA as happened in their primary schools.

1. *In-house PD programme is having a positive impact both on classroom practice, pupil understanding and strengthening collaborative culture*

This was evident throughout the second visit. There was evidence of teachers using new questioning approaches in lessons and this leading to deepening pupil understanding. All members of staff interviewed were happy to share their learning and gap tasks; they all spoke very highly about how important questioning was, how much the appreciated the PD and how evidence based and well-designed it was. What was particularly impressive is that they were comfortable to share the errors they had made and what they had done about it; this is significant in a department of this size and diversity. Teachers visiting others classrooms in a lesson study model underpins this willingness to be professionally vulnerable.

1. *Careful through needs to be given to aligning departmental PD and whole school PD*

The school is using the Embedding Formative Assessment (EFA) through the School, Students and Teachers network (SSAT). This is a structured, rigid programme that involves teachers across the whole school working across departments. Whilst none of the EFA principles contradict with the Head of Department’s vision for maths and teaching for mastery, the sequencing of departmental PD need to dovetail, enhance and resonate with the EFA programme and vice versa.

1. *Getting past the ‘scheme’*

The HoD has identified that some of the department view following the bought scheme as teaching for mastery. She has identified planning that supports the most effective classroom practice involves a synthesis of the scheme with other resources, such as NCETM PD materials. This is supported by limited evidence from the lessons visited with careful tailoring of resources supporting pupils’ understanding. There was evidence both from lessons seen and pupil interviews that blind adoption of the scheme sometimes limits pupil understanding.

**Conclusion**

The academy appears to be in a good position to further develop teaching for mastery across the department. Collaboration and peer learning sits at the heart of this and will need continued support from senior leadership. *Focussed professional development activities continue to build capacity and professional capital across the department; there is scope for this to be strengthened further, for example, through collaborative work that leads to a Canterbury Academy Mathematics Lesson Charter that lays out features, expectations and an entitlement that pupils can expect from every lesson. Departmental agreement on this could then further facilitate a responsibility culture and support joint accountability for what is going on in the classroom.* The school has an excellent relationship with the Maths Hub and further targeted engagement with programmes could support inter and intra school collaboration. *Another member of the department becoming a Secondary Mastery Specialist would support the continued building a critical mass for further pedagogical change*