



Mastery Vision & Learning Profile

The road to mastery

The journey towards developing and improving our mathematics curriculum began in 2013. It was brought to my attention through book scrutinies that we needed to develop cohesion and progression of methods throughout the school. We needed a 'spine' for staff to use as reference so invested in Abacus. This worked well in ensuring age related objectives were taught cohesively and provided staff with activities to develop a greater depth of understanding whilst also improving reasoning skills. The changes to 'mastery' over the years, alongside raised attainment at Jarrow Cross due to the successful implementation of Abacus, led us in 2016 to the fortunate position of being ready to broaden our curriculum. Since then, we have invested a lot of time and resources in developing staff CPD to support this shift in teaching and learning and begin to harvest a growth mindset. The maths lead spent 2016/17 working alongside Seaham Academy, an outstanding teaching school, developing her skills to be able to successfully implement and monitor mastery in Jarrow Cross. Whole school INSETs, bar model training and concrete and pictorial resources (Numicon, Base Ten, Tens Frames, Place Value Frames, Part-whole Models) were introduced and an emphasis was placed upon developing pupils reasoning skills. In September 2018, Power Maths was introduced in Key Stage 1 alongside a mastery framework in foundation stage with a change of calculation policy to reflect the use of manipulatives. This was further rolled out into Year 3 in September 2019, then Year 4 in September 2021. Our continued focus in the fore coming years is to continue to embed mastery elements throughout the entire school with a focus on developing reasoning using STEM sentences, understanding the equals sign to show value rather than an answer, providing variation and developing number sense to allow *all* pupil the opportunity to succeed in maths.

What mastery maths lessons look like at Jarrow Cross

At Jarrow Cross, maths work is planned and matched to children's individual needs with the aim that children progress through the curriculum at broadly the same pace. In every lesson there is an emphasis on communicating, using the correct mathematical language, explaining why a statement or calculation may be incorrect and sharing an approach to problem solving. Most may begin with number skills to improve fluency and number sense and, where possible, are linked to the main objective of the lesson. Mixed ability talk-partners and collaborative is encouraged and no child has a set group or seat; groups are fluid where-by children are moved accordingly to match their skills and areas of challenge. We follow a lesson design where children are posed a real-life problem, they work together to find a suitable solution then share their methods and reasoning. The next step in a lesson follows 'I do, we do, you do' ensuring children build their knowledge, skills and confidence to be able to use and apply their skills independently. The use of concrete resources and varied representations to develop understanding of more abstract concepts is encouraged and differentiation is through the use of manipulatives, adult support and level of challenge, where possible. In cases where children are already fluent in a skill, they will begin the lesson on an application task which will allow them to reason, make connections and think mathematically. All pupils are expected to reflect on their learning at the end of each lesson to consolidate and further develop reasoning.

Supporting children

Through the observations of teachers, support staff and the marking of children's work, children who have not achieved the learning objectives are identified. These children receive same-day intervention, where possible, delivered by either the class teacher or a TA following the philosophy of 'keep up rather than catch up.' Where no children are identified, content for subsequent lessons is sometimes pre-taught, where required. Running alongside this, we have three TAs qualified in delivering Becoming 1st Class @ Number, 1st Class @ Number (key stage 1) and 2nd Class @ Number (key stage 2).

Tracking attainment and progress

We use an in-house tracking system that was built to our specific requirements. Teacher assessments are uploaded termly and evidence is gathered from books, end of unit/half-term test results and individual pupil progress target sheets. Pupil Progress meetings are held every half term and the data is analysed. This is used to inform us which children are exceeding or not meeting their personal progress targets. It also identifies whether gaps between learners are being narrowed. We compare these assessments to children's early years exit data to ensure individual progress is being monitored. The information gathered from these meetings is used to assess, evaluate and plan further intervention where required.