Reviewed: 26-08-24

Nether Stowey's Teaching for Mastery Policy

At Nether Stowey Primary School, we are delivering a mathematics curriculum that values depth of learning and complete understanding of how the number system works. Our aim is to produce mathematicians who are versatile because they have a range of methods to solve each question. An extension of this is that we want our children to be able to select the most efficient of their methods based on the individual question. We also aim to ensure that our children are able to explain their answer, and method, in full sentences and using the correct mathematical vocabulary.

Planning

As a school we will be following the White Rose planning guidance. We will not follow it rigidly with regards tasks etc, but we will follow it regarding what skills are taught and in which order they are taught. For mixed age classes, this may be slightly adjusted at times. When planning, we will consider:

1. What is the new small step for the lesson?
2. What is the key learning and vocabulary that can be put into a sentence stem?
3. What might the common misconception be?
4. Remember to show what the learning is not e.g. for area, show perimeter and ask what is wrong.
5. Encouraging conjecture, persuade and prove.

Our outline for teaching a unit/skill

1. The skill being taught will be the same for every member of the class (except in exceptional cases) and this is linked to Growth Mindset because we will be encouraging and fostering an environment where children know everyone can succeed and that everyone can be accomplished mathematicians. The skill being taught will not change until 90% or more of the class have grasped that skill. The children that haven't grasped it will be recorded and they will receive extra support within a week (and on many occasions within the same day) that closes this gap. "Rapid-graspers" will not be pushed on to new skills before the rest of the class, but will instead have their understanding improved through things such as questioning from the teacher, explaining their answers in a range of ways and having access to complex questions/tasks/activities (although still based on the same skill as the rest of the class) during the independent part of lessons.

A typical lesson/series of lessons may look like this:

1 A skill will be introduced to the class. Everyone will know what they are expected to learn and be able to do by the end of the lesson. There will be back and forth

interaction between the class teacher and the children based on this. This will give them the new skill and understanding. They will then progress to an independent task linked to the new skill/knowledge. These tasks will range from fluency, to reasoning, to problem solving questions and may only be a few questions to confirm the learning that took place at the beginning of the lesson. Those identified as needing support for this, will have an adult with them for the tasks. Lessons will finish with a "Thinker". This is a fluency question, reasoning question or problem for children to try and solve based on their new skill. It should be challenging because of the way it is worded, how it is presented or the criteria within it, and will be slightly different to what they have had to that point. Not all children will necessarily be able to answer it, and some may not get that far, however, all the class will be involved in reviewing this question and exploring how it could be solved. A similar question may well be put on the board the next morning during registration.

2 At the end of each lesson, work will be assessed by the teacher and child and from this, Keep-up sessions will take place, ideally that day, to ensure that they are at the same point as the rest of the class for the lesson the next day.

3 Project maths and practical tasks (which will be cross-curricular where possible) will provide opportunities for children to recognise when maths may be important within their daily lives and also provide opportunities to exhibit depth of understanding. They will typically be conducted at the end of a teaching sequence and focus on the skills just taught. These projects should really get the children enthused and allow them to understand why they are learning maths.

How we intervene swiftly

The first way in which we intervene to ensure children keep up is after the initial introduction of a skill. Those who have not grasped it will work with an adult to try and ensure that it has been grasped by the end of the lesson.

The second way is by assessing work at the end of a lesson. This allows you to identify any of the children who are not secure or happy with the skill. They will then undertake a Keep-up session; usually that same day.

Assessment

All year groups will use the White Rose end of term assessments to help inform our pupil assessment and aid our future planning. Each assessment has an accompanying RAG spreadsheet. The RAGs allow us to identify individual strengths and weaknesses as well as class strengths and weaknesses. Furthermore, each question is linked to the area of the curriculum that skill was taught in, alongside which year it was taught. This allows for us to record who has grasped and retained knowledge/skills as well as who needs further input or consolidation.

Tracking

The White Rose RAG spreadsheets are a permanent record that allows us to track a pupil's progress and attainment across their primary school journey, specific to each skill taught. Each

year, there is also an analysis of the results which compare children's % score each term, allowing us to track if they are improving their knowledge and understanding. Conversely, it also highlights those that are not making adequate progress, or declining, which is yet another way for a teacher to identify children who require more/different support. Using this system provides continuity and historical data which is available to teachers. It is also very helpful for new teachers who join the school, as they can easily gain an overview of their class, as well as individual pupils.