St. Anne’s Catholic Primary School

Maths Marking Policy

Introduction

In Hattie's research 1999 comparing 500 meta-analysis of over 180,000 studies involving 20-30 million pupils, the power of feedback to impact on learning outcomes was on average twice the size of other influences on achievement including direct instruction, reciprocal teaching, prior ability, reduced class size and other factors such as socioeconomic factors. This research is further backed up by The Sutton Trust.

Further research (Black et al 2003) shows that the most effective and beneficial forms of assessment are ones which support learning (i.e. are formative) and are built-in to lesson design. In primary mathematics they require:

- well-structured classroom activities (involving conceptual and procedural variation and intelligent practice);
- regular opportunities for discussion of answers and strategies to support pupils' reasoning skills and check and deepen their understanding;
- interaction and dialogue (between teacher and pupils, and between pupils themselves), focusing in particular on key ideas and concepts (including misconceptions and difficult points) and effective, efficient strategies of working mathematically.

Marking and evidence-recording strategies should be efficient, so that they do not steal time that would be better spent on lesson design and preparation. Neither should they result in an excessive workload for teachers

Misconceptions and Errors

At this point, it is important to differentiate between misconceptions and errors. An error can occur for a number of reasons: they may be due to the pace of work, the slip of a pen, a slight lapse in attention or a lack of knowledge that will soon be obtained. However, sometimes mathematical errors are the result of a fundamental misconception, which can be difficult to identify and, in some cases, take years to rectify (Cockburn, 1999). Misconceptions are different to errors and can be attributed to children generalising from their early mathematical experiences or the misunderstanding of a rule or mathematical process (for example, children believe the more digits a number has, the larger its value). Swan (2005) describes misconceptions as reasoned, alternative ways of thinking and suggests teaching approaches that encourage the exploration of misconceptions through discussion. It is this exploration that will result in deeper learning when compared to approaches that try to avoid misconceptions.

The teacher's ability to differentiate between an error and a misconception is paramount to quality teaching. For example, for slips it is often enough to simply indicate where each slip occurs, particularly when the school's approach is to encourage pupils to correct them; if errors demonstrate lack of understanding (misconception), the teacher may decide to take alternative courses of action. For instance, with a small number of pupils, the teacher may arrange same-day (ideally) or next-day/lesson intervention while for a large number of pupils, the errors/misconception will be addressed in the next lesson.

Aim

The aim of this policy is to ensure clear understanding of the purposes, procedures and processes of effective marking and feedback to pupils regarding their work in order to maximise progress and support pupils in becoming affective learners. Effective marking and feedback is integral to good teaching and learning processes. By empowering pupils to be actively involved in understanding how they are making progress, it helps to embed learning swiftly and enables accelerated learning.
Effective marking and feedback aims to:
1. Inform the pupil what they have done well and what they need to do to improve.
2. Support pupil confidence and self-esteem in learning, and contributes to accelerated learning.
3. Support teachers' assessment knowledge of each pupil as part of thorough assessment for learning procedures, in order to plan and refine next steps in learning.
4. Develop consistent processes across the school to teach pupils to respond to feedback, self-assess and evaluate their own learning.

Presentation of Work in Maths Books

- As with any book children must be reminded to use their neatest presentation at all times.
- One number per square in all maths work.
- Children should use purple 'polishing pens' when responding to work.
- Only pencil should be used for the children to record in their maths books.
- Aim to have two to three pieces of recorded work in books for each week – although this is not set in stone and may vary week to week.

Types of Marking

Three types of marking and feedback occur during teaching and learning at St. Anne's:
i) **Teachers' well considered intervention** to prompt deeper thinking, and swiftly address misconceptions during lessons. This takes the form of verbal feedback and occurs through effective questioning to clarify or refocus tasks and enquiry, mini plenaries and mid-lesson adjustments. It may also be verbal feedback given during a 1:1 interaction with a pupil or in a group basis.
ii) **'R,C,M' marking of work,** acknowledging and recognising attainment and/or progress, success and/or completion of pupils' work.
iv) **Self-assessment and peer assessment** of the attainment and success of a piece of work.

This policy sets out the procedures agreed by the school to ensure a consistent and impactful approach to effective marking and feedback at St. Anne's.

Non-negotiable Procedures for Marking Mathematics

All marking is to be carried out in green pen.

All marking is to be done in a clear legible hand aligned to the school handwriting script.

All pupils' work is to be marked using the 'R,C,M' approach.

(GA) stands for guided assistance and indicates when a child has worked with a teacher/support staff on an area of mathematics that they cannot complete on their own.

(VF) stands for verbal feedback and indicates when a teacher has given feedback to a child within the lesson to provide them with next steps to progress their learning.

Marking will include:

- Ticking right answers.
- Placing a ● next to any wrong answers that indicates an error not a misconception.
- Children must be given time to correct the error and this should be completed with a purple 'polishing pen' (this must become second nature to the children).
- Acknowledgement of hard work – always try to focus on effort.

Appendix 1.
Maths Verbal Feedback Prompts

Maths Prompts
Look back at your work – can you add…(your method, a number line)
How could you check this?
Can you find where you went wrong?
Now try these… (extension questions/Consolidation questions)
If the answer was ….. What could the question be?
Is there another way you could do this?
Can you find a quicker way of doing this?
Highlight where you have used (column method, grid method, a strategy to check your answer, etc)
Tell me 1/2/3 reasons why I should give you a House Point for this work
Tell me … that have …?

Tell me two numbers that have a difference of 12.
What ... would you use to…? e.g. What unit would you use to measure the width of the table?
What are the … of … ? What are the factors of 42?
What is another ... method that might have worked?
Verbal: Please talk me through what you have done so far.
Show me how you could do it with … simpler numbers … fewer numbers … using a number line?
What new words today? What do they mean? What maths words also mean...?