

Full Governing Body Paper – Maths Update Report					
From: Noreen Neale Date: 15 th July 2024					
Date of meeting: Monday 22 nd July	Agenda Item No.				
Aim of paper: For the Governing body to review the Maths Updates					
Action required: For the Governing body to review and note the report.					
Strategic Objective: Curriculum update based on Ofsted 2019 report					

Introduction

This report provides a comprehensive overview of the mathematics provision at Beam Primary Schol, based on the latest evaluations and data, including insights from the 2019 Ofsted inspection. It highlights our school's strengths, identifies areas for improvement, and outlines strategies for enhancing the quality of mathematics education.

Background

Beam Primary school received its Ofsted inspection in 2019 before the school's closure due to the pandemic. Their findings were as follows:

'Leaders have recently introduced a new scheme for mathematics. This provides a clearer progression in the development of pupils' knowledge, skills and understanding, and a greater focus on mathematical vocabulary. This is working well so that pupils continue to achieve highly in mathematics. Children in the early years benefit from a curriculum that gives them a positive start to learning mathematics.' – Ofsted 2019

Since the reopening of school post covid, several reviews were conducted and developments made. One of the key changes that were made following our evaluation was to align our intent to the school's vision:

Intent

At Beam, we believe that every child is capable of being an inspiring and confident mathematician and a problem solver. The overarching aim of our curriculum is designed to:

- foster interest in Mathematics
- ensure all pupils achieve a level of mastery;
- build their capacity in solving practical problems in the real world;
- empowers them to take ownership of their learning;
- and continually challenge themselves in the pursuit of Mathematics at its highest possible level.

Challenges and barriers: Pupils were learning mathematical concepts at surface level, and were not able to make connections between concepts. There was a lack of mathematical talk, resulting in the inconsistent use of Tier 3 vocabulary.

Actions: Ensuring all maths lessons display principles of teaching mastery.

- 1. We identified principles we would like to see in classroom to support pupils in achieving a level of mastery. The principles identified were:
- lessons utilise of mathematical representations that expose the underlying structure of the mathematics;

- lessons help children make sense of concepts and achieve fluency through carefully structured questions, exercises and problems, which develops conceptual understanding and procedural fluency simultaneously
- lessons combine whole class discussion and precise questioning with AfL and intelligent practice, providing individual support where necessary
- 2. We implemented a consistent structure in Maths lessons across the school to ensure these principles were met.
- 3. We invested in concrete materials to ensure that every classroom had equal access to resources.

Impact: Learning walk and pupils' voice findings revealed that the use of Tier 3 mathematical vocabulary and mathematical talk were consistent across the school. Findings from teachers' voice were positive; the main strengths elicited was the improvement in pupils' mathematical vocabulary and the deeper understanding of concepts when mathematical structure was revealed using concrete materials.

Children are confident in using mathematical vocabulary and confident in using ten frames, part-whole models and numberlines. Children are enjoying Maths and engaged during lessons. Our team are working well together to discuss what is working well and adjusting our learning according to our discussions and the children's needs.

Discussions, implementation of vocabulary in lessons, exploring a range of resources.

I like the exposure to a range of questions types and resources

Anchor tasks are effective components within the lesson. White Rose/Power Maths synergy is useful in terms of resources.

Children are starting to build on their fluency and arithmetic skills.

Figure 1: Teachers' feedback on the change of lesson structure and scheme

Challenges and barriers

Findings from monitoring cycle conducted in 2023 (second phase) showed that pupils were not able to achieve their full potentials due gaps in number facts and ability to make connections. Pupils need to learn strategies and the most useful combinations of facts and methods to solve types of problem.

Action: Enable pupils to develop a rich network of mathematical knowledge

- 1. Putting systems in place to ensure that pupils develop fluent recall of number facts. Systems in place are:
 - Soft start focusing on taught mathematical strategies (additive reasoning and multiplication check for Year 4)
 - Mastering numbers in Reception and KS1 to develop strong foundations in subitising (EYFS) and instant recall of addition facts

Impact: Overall, there has been a high level of progress and attainment in Maths.

2023	2024
64% of pupils scored the upper threshold	91.5% of pupils scored the upper threshold

Table 1: Year 4 Multiplication Check

EYFS:	
Baseline	EOY Attainment
38%	81%

Table 2: EYFS Maths attainment (baseline and end of year)

	2022 - 23		2023 - 24			
	Data with Exempt pupils 8 – Maths 9 – GPS & Reading (1.19%)	Data without exempt pupils	Data with Exempt pupils 7 – Maths 8 – GPS & Reading (1.2%)	Data without exempt pupils	% Data with Exempt pupils Change	% Data without exempt pupils Change
				Maths		
EXS	80%	89%	84.33% (70)	92.11% (70)	+4.33%	+3.11%
GDS	30%	33%	42.16% (35)	46.05% (35)	+12.16%	+13.05%

Table 3: End of KS2 attainment and progress in 2022-2023 and 2023-2024

Next Steps (2024-2025)

- 'Intelligent practice' is yet to be consistent across the school. Maths lead will have a protected time in Autumn to support teachers in Maths planning.
- Soft start fluency sessions will need to be more structured for effective monitoring and assessment. Additive reasoning will remain to be the focus in Autumn. Multiplicative reasoning will be shared in Spring.
- Curriculum has been reviewed so that certain concepts (such as number and statistics) can be revisited through cross curricular links.

Next steps (2025-2026)

- Teaching problem solving strategies need to be explicitly taught.
- Reviewing of curriculum: We understand from the findings of Ofsted Coordinating mathematical success (2023) that leaving Geometry to the Summer term results in a long gap before the concept is revisited. This will be reviewed again in the third cycle.