TRANSFORMING MATHS

Staff Briefing: Mathematics in the Early Years

Focus: Key Findings from the 2023 "Coordinating Mathematical Success" Report
Target: Experienced EYFS Practitioners

https://www.gov.uk/government/publications/subject-report-series-maths/coordinating-mathematical-success-the-mathematics-subject-report

1. The Curriculum is Not the ELGs

The report found a recurring weakness where schools treated the Early Learning Goals (ELGs) as the curriculum itself.

- The Finding: ELGs are assessment milestones for the end of the year, not a teaching sequence.
- The Expectation: Experienced teachers should ensure their planning identifies small-step prerequisites. We must plan the journey *toward* the ELG, detailing exactly how a child moves from "counting 1 to 5" to "understanding the composition of 10."

2. Prioritise "Declarative Knowledge"

Even in Reception, the report emphasises the importance of facts being stored in the long-term memory.

- Automaticity: It is vital that children don't just "find" an answer by counting, but "know" the answer. By the end of EYFS, pupils should have automaticity in number bonds to 5 and the doubles facts.
- Subitising: This must be a daily priority. Children need to recognise quantities without counting to reduce cognitive load in Year 1.

3. The Power of "Deliberate" Play

While the "prime areas" are often led by child-initiated play, the report suggests that mathematical success requires adult-led precision.

- Instructional Balance: High-quality settings balance "incidental" math (counting snacks) with "deliberate" teaching sessions where concepts are modelled explicitly.
- Non-Examples: Use your experience to challenge thinking. If teaching "circles," show a "non-circle" (an oval) to help children define the properties of the shape through what it is *not*.

4. Vocabulary as a Tool for Equity

The "word gap" in mathematics starts early. The report notes that successful EYFS settings explicitly teach Tier 3 mathematical vocabulary.

- Precision: Avoid "vague" language. Use terms like *fewer*, *greater*, *equal*, and *partition* during play.
- Action: Create a "Talk-Rich" environment where children are encouraged to explain *how* they know a group has five items (e.g., "I see a 3 and a 2").

5. Resource Management & Cognitive Load

Experienced teachers know that "busy" classrooms can be distracting. The report confirms this.

- The "Busy" Trap: Highly decorative or "themed" math resources can actually distract from the mathematical structure.
- The Solution: Use "clean" manipulatives (plain counters, simple tens frames, Rekenreks). These allow children to focus on the quantity rather than the "dinosaur" or "bear" they are counting.

6. Bridging the "Year 1 Chasm"

Ofsted identified a significant dip in progress during the transition to Year 1.

- Consistency: We must ensure that the tools we use in Reception (like the "part-whole model") are exactly the same as those used in Year 1.
- Ready-to-Progress: Our goal is to hand over children who have "mathematical certainty" in numbers to 10, so Year 1 can focus on the abstract addition and subtraction.

Reflection Questions for the Team:

1. Does our medium-term plan show the *small steps* between ELG milestones?
2. Are we giving enough time for "deliberate practice" of number bonds to 5?
3. Are our math areas too "busy"? Could we simplify resources to focus on structure?

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