

## Little Paxton Primary School - Report of Governor Visit

Date	July 13 <sup>th</sup> 2017
Focus of Visit (School Priority)	Teaching of Mathematics using the Maths Mastery approach in Y5 & Y3
Personnel present	Tracey Locke – Governor Ellen Barrett – Governor Jordana Watts – Deputy Head Teacher, Y5 Teacher and Maths Mastery Lead Rebecca Stapleton – Y3 Teacher Rochelle Jackson – Y3 Teacher  3 Children from Y5 3 Children from Y3
Purpose of Visit (Action from TOP to be monitored)	To monitor the implementation of the Maths Mastery approach in Y5 and Y3 prior to it being introduced to the whole school
Background (If necessary)	<p>Diane Hawkes (HT) &amp; Jordana Watts (DHT) are working with National College for Excellence in Teaching Maths (NCETM) who have 35 hubs, one in Cambridge on the Maths Mastery programme. Maths Mastery has its roots in Shanghai and Singapore; two of the highest performers in mathematics education and is a long term investment in the professional development of teachers in Little Paxton School. The approach is based on 6 classroom principals; Success for all (including teaching across ability), Problem solving, Mathematical language, Deeper understanding, Mathematical understanding, Mathematical thinking and Multiple representations. Maths Mastery is developed using 'Five Big Ideas'; Coherence, Representation and Structure, Variation, Fluency and Mathematical Thinking. As it is an approach rather than a scheme it progresses alongside the curriculum</p> <p>Nationally it has been found that when Mastery is first taught progress levels seem to dip for possibly the first and sometimes second year. This is because it is not a quick fix strategy but concentrates on embedding skills when taught. For years teachers have battled with revisiting basic skills each year as when taught, they were not embedded enough for most children to retain. The teaching for Mastery approach aims to spend longer on all the basics, especially number. Consequently this can mean that less new content is covered and so progress is slowed. There is clear evidence from schools now in their third and fourth years of teaching for mastery that</p>

	<p>progress picks up as children go through the school. Another Cambridgeshire Primary who have been on this journey certainly experienced these issues having introduced it across the whole school immediately.</p> <p>There has been much discussion on NCETM website and more locally about the format of the programme; Mastery Specialists have a clear contract to spend certain amounts of time supporting other schools for which their host school is paid. The support time for their own school is not built into this and specialists have to try and fit this round their contracted time - quite difficult. Maths Hubs have also brought this issue up with NCETM but no changes so far!</p>
<p>Summary of visit (Evidence seen)</p>	<p>Teachers liked Maths Mastery because:</p> <ul style="list-style-type: none"> <li>• The children are taught together</li> <li>• Hearing the children talk maths</li> <li>• Seeing the learn from the activities</li> <li>• Teaching all abilities together</li> <li>• Building up a picture</li> <li>• In lesson interventions – from marking in class</li> <li>• Assessment for learning – from marking in class</li> <li>• White Rose (free resource) is really good</li> <li>• Mathematical fluency, problem solving and reasoning</li> <li>• The problem solving and reasoning pushes higher ability children – prepares for SATS</li> <li>• White Rose helps you plan your own lessons and the best lessons you teach are the ones you plan yourself</li> <li>• Stem sentences reinforce the rules of maths</li> </ul> <p>Teachers disliked Maths Mastery because:</p> <ul style="list-style-type: none"> <li>• Finding activities for the children – there are lots of resources but finding the right ones</li> <li>• Because the children are not streamed you can end up leaving the higher ability children to themselves</li> <li>• ‘No Problem’ maths resources were not found to be useful</li> </ul> <p>Teachers thought that Maths Mastery had impacted on the children’s learning in the following ways:</p> <ul style="list-style-type: none"> <li>• For the more able – reasoning and problem solving</li> <li>• Maths vocabulary is better, Stem sentences allow the children to communicate their ideas with mathematical precision</li> <li>• Higher ability children help lower ability children by talking through ideas and problems</li> <li>• Stem sentences allow the children to communicate their ideas with mathematical precision</li> <li>• Weaker learners have got more from it</li> <li>• The children are more confident in maths</li> </ul>

	<p>Teachers found the process particularly effective in these areas:</p> <ul style="list-style-type: none"> <li>• fractions</li> <li>• different examples (Variation)</li> <li>• breaking concepts down, small steps in learning</li> <li>• Where children have learning difficulties – they are all treated the same because of the resources, but still have interventions running outside of lessons with the TAs</li> </ul> <p>The children we spoke with had enjoyed learning maths this year and were proud of the work they had completed in maths. The Y5 children showed us samples of their work including multiplying mixed numbers where we could also see detailed positive teacher feedback, converting between kg &amp; g and converting periods of time</p> <p>One Y5 child found the work too easy and preferred being taken out of class to do more challenging work but others found the work ‘sometimes confusing’ and also preferred to be out of class but to catch up to catch up. The majority of children felt they had made good progress during the year with one telling us ‘...got a 1 for progress (more than expected progress). Miss Watts made me realise I can do it’ and another ‘(was) really struggling but better this year’</p> <p>Progress and attainment data for maths for Y5 and Y3 for 2016/17 was provided</p>
<p>Findings (Progress and Impact seen or cited by staff and students)</p>	<p>Children who started the year below Age Expected Expectations (ARE) made at least expected progress with some making more than expected progress.</p> <p>For those children who started the year at or above ARE a number made less than expected progress with this being more noticeable for those who started the year above ARE</p> <p>The above results are also reflected in pupil and teacher feedback</p> <p>Following our visit we have been told that the ‘No Problem’ paid for scheme will not be used going forward and that ‘White Rose’ which is a free resource will be adopted for the 2017/18 year. This is following feedback from the teachers involved in the early roll out of Maths Mastery.</p>

<p>Feedback to Governing Body  (Recommendations)</p>	<p>Having looked at the progress data for reading and writing for these two year groups and Y4 who did not use Maths Mastery it is difficult to conclude if the maths results are a result of the introduction of Maths Mastery or part of a wider trend. We suggest a further visit to be arranged January 2018 based on Autumn Term 2017 progress data across the school. We would again like to see a group of children of different abilities who we have not already spoken with and teachers from Y4 &amp; Y2</p>
--	---