

At Fishbourne Primary, we recognise that change doesn't happen overnight! Underpinning our school development plan is an understanding that development is a living and breathing process, one that requires professional tinkering along the way! We are passionate about developing a strong learning culture in school and are relentlessly optimistic about our vision for all learners at Fishbourne Primary.

In order for change to be implemented well in our school, we must move through four key phases: EXPLORING – PREPARING – DELIVERY – SUSTAINING

Because of this, we want to share with you not only our key priorities for development this academic year, but the journey we have been on over the last five years. We recognise we are in different stages of the journey for different areas of the curriculum and so, on our 'Journey towards...' documentation below, you will be able to see where we are in this journey currently and get a sense of the journey we have been on!



## Our Journey Towards Conceptual Mathematics Fishbourne Church of England Primary School

January 2015 – September 2015	September 2015 – July 2016	September 2016 – July 2017	September 2017 – July 2018	September 2018 – July 2019
<p>A focus on learning rather than teaching. The emphasis moving from 'performance of the teacher' (sage on the stage) to 'impact on learners' (guide from the side).</p> <p>Abacus removed as a 'scheme'. The national curriculum put centre stage and sequences of teaching and learning developed with clear baselines showing where the children are and what they need to know.</p> <p>Book Looks established in school with training for middle and senior leaders about the process of monitoring children's progress in their books.</p> <p>June 2015 – OFSTED</p>	<p>Continued to build understanding of sequences of teaching and learning with 'steps of learning' – moving away from planning activities to planning learning opportunities.</p> <p>CPD on developing staff moving forward planning their own sequences of teaching. Staff meeting on fluency, reasoning and problem solving and the NCEIM 'Progression in Reasoning' document shared.</p> <p>Staff signed up to the NCEIM and directed towards the planning tool.</p> <p>Baselines carried out and sequences of teaching built from the baselines. Opportunities for assessment windows away from the point of teaching.</p> <p>Progress measured and reflected on using arrow charts.</p> <p>Where possible and relevant, maths was linked to real life problems and contexts.</p> <p>Professional Reading: Inspirational Teachers, Inspirational Learners by Will Ryan.</p> <p>Introduction of 'assessment without levels' KPI approach.</p>	<p>Maths club run to develop girls' confidence in maths. Invite only and targeted to engage and develop sense of enjoyment.</p> <p>White Rose termly plans adopted as medium term plan. The termly overviews used to ensure pitch and progression.</p> <p>Resource audit undertaken and investment in numicon, base 10, place value counters among other things. School resourced to teach conceptually ensuring the structure of maths is explored with manipulatives.</p> <p>Maths locality project undertaken by maths coordinator exploring the use of manipulatives and pictorial representations in maths.</p> <p>Shared Planning time (inc 1:1 with NQTs) to focus on building a conceptual understanding.</p> <p>Coordinator attended two day Sussex Hub course on Developing a Mastery Approach.</p> <p>Ronit Bird's 'Dyscalculia Toolkit' and 'Overcoming difficulties with maths' purchased to help teachers work with those children who are struggling with basic number sense.</p> <p>Children wrote their school reports as 'reflections on themselves as learners' during 'Mirror, Mirror on the Wall' mid-year. Staff write their response with children as the core audience</p> <p>Teachers learn how to carry out their own Book Looks and given time to reflect on the evidence of learning in their own books.</p> <p>Moderation – in school and through the locality – resulting in staff confidence and understanding of what the 'expected standard' looks like in each year group.</p>	<p>Maths club run to develop girls' confidence in maths. Invite only and targeted to engage and develop sense of enjoyment.</p> <p>White Rose Small Steps introduced to further support teachers.</p> <p>CPD: using visual and concrete resources, understanding numbers and developing a 'number sense'.</p> <p>Book looks and lesson studies evidence conceptual teaching and use of visuals and manipulatives (Spring 2018)</p> <p>Progression in Calculation document discussed and reviewed as a staff. All staff familiar with it. Progression will be reviewed next year when we have taught a year of 'Small Steps' and can reflect on how it fits together.</p> <p>NFER tests introduced in Years 3, 4, and 5. This enabled teachers to carry out a detailed QLA at the beginning of the year. Years 2 and 4 carried out QLA on 2017 NCT results and tests administered in September to current cohorts.</p> <p>Emphasis of AfL shifting – less feedback, more impact. Baselines are a key opportunity to give feedback about how to improve and staff use them strategically to plan the steps of learning during a learning experience.</p> <p>Whole school learning experiences: Billions of Bricks (maths). Children engaged in a variety of real life learning opportunities with bricks. Whole school focus on conceptual understanding and real life contexts.</p> <p>Summer holiday challenge was 'Extreme Card Playing'. Every child given a pack of playing cards and some ideas for games. Children sent in photos of themselves playing games (eg 21) over the holiday.</p>	<p>Maths club run to develop girls' confidence in maths. Invite only and targeted to engage and develop sense of enjoyment.</p> <p>Progression in Calculation reviewed. 'Calculation Policy' rewritten based on White Rose and Surrey Hubs' calculation policies, and the National Curriculum.</p> <p>LSA and 2 teachers undertaking 'Every Child Counts' training including '1stclass@number' and 'success@arithmetic'. Focus on Pupil Premium children initially. Opportunities for training to cascade into classes where appropriate.</p> <p>Autumn CPD focus on opening up baselines – ensuring that we find out misconceptions children have and strategies they do know.</p> <p>Spring CPD focus on developing our own questions / intelligent practice to challenge every learner.</p> <p>Lesson Study with a focus on meeting all learners starting points – including all teachers and LSA's. Lesson Study process modelled using an example and reflections shared before staff supported one another's reflections.</p> <p>Personalised appraisal targets introduce: <i>'The SDP is our school curriculum for teaching staff, this is my personalised step of learning – the single thing that will make the biggest difference to provision in my classroom...'</i></p> <p>Whole School Learning Experiences: Where in the World? (Geography), Choose Respect (PSHCE), Together (IT), Matilda (English)</p>



## Our Journey Towards Conceptual Mathematics

### Fishbourne Church of England Primary School

September 2019 – July 2020 C19	September 2020 – July 2021 C19	September 2021 – July 2022	September 2022 – July 2023	September 2023 – July 2024
<p>Training for the whole staff team (teachers and LSA's with 3 governors) to introduce the concept of 'Maths Mastery' and explore current levels of understanding, led by Sam Parkes at the University of Chichester. By doing so, there is a common understanding of the 'why' for the approach.</p> <p>Maths No Nonsense introduced throughout school – an opportunity to regularly revisit mathematical concepts and increase fluency following a recognition of the limitations of the White Rose planning.</p> <p>Maths leadership team become part of the NCETM Maths Mastery working group, exploring the 5 core concepts of the mastery approach: Representation, Mathematical thinking, Fluency, Variation Coherence</p> <p>Self-evaluation visits take place with the NCETM practitioner</p> <p>Staff CPD with a focus on lesson design: Teachers observe a modelled lesson taught by one of the maths leadership team. The observation focused on fluency – efficiency, accuracy and flexibility.</p> <p>Planned lesson study on fluency – this didn't take place due to lockdown.</p>	<p>Introduction of a 'thinking tool' to support planning for maths mastery. Staff given support in learning to use this tool effectively in the deep thinking that goes into planning.</p> <p>Maths Leadership team continue to work alongside the NCETM as part of the 'developing to embedding' teacher work group.</p> <p>Professional reading from 'Putting Staff First' by John Tomsett linked to the introduction of Inquiry Questions to support staff CPD</p> <p>Lesson Study focused on the use of the maths planning thinking tool led by the maths leadership team to support coaching conversations about children's learning. Lesson study used as an opportunity to identify an Inquiry Question for development into the spring term.</p> <p><b>** Lockdown Jan – March 2021 **</b></p> <p>Opportunities used during lockdown for staff CPD in maths. Professional reading opportunities about mathematical talk.</p> <p>Staff 'deliberately practised' use of stem sentences during home learning and made a filmed input to support maths learning.</p> <p>Inquiry Question approach introduced and explored as a staff team (linked to appraisal). <b>What impact does the use of structured stem sentences, delivered over a period of six weeks, have on lower attaining groups of children's ability to articulate their thinking and learning?</b></p> <p>Presentations of Inquiry Question findings.</p> <p>Maths Pedagogy statement written which explicitly outlines the why? how? what? of the approach to the teaching of mathematics at Fishbourne Primary School.</p>	<p>Moving into DELIVER for maths mastery – ensuring a robust mathematical pedagogy rooted in the principles of mastery is delivered consistently across the school.</p> <p>KS1 team start to use NCETM's Mastering Number programme in addition to their usual provision. This becomes the key planning for children in EYFS. All staff receive CPD termly from NCETM and report that they see a positive impact on children's fluency as a result of the programme.</p> <p>KS2 team address children's fluency in times tables through daily instruction and practice using a number of online apps. Progress is tracked half termly and children falling behind are identified rapidly and receive targeted interventions.</p> <p>Inquiry Question for KS2 team – What impact does bar modelling have on children's confidence to engage in reasoning problems? Bar modelling becomes another tool in the tool box for staff.</p> <p>Further CPD offered to staff on Big Questions and these are re-branded as 'Open Questions' – Maths pedagogical statement is updated.</p> <p>Fluency in five is introduced across KS2 as a tool with which to give children additional opportunities to become as fluent and automatic as possible.</p> <p>Doodle Maths is introduced across the school as an online tool to support practising outside school and to provide intervention work where needed.</p> <p>Maths Pedagogy statement is updated.</p> <p>New staff work alongside maths leadership team to ensure that they receive support for induction into the pedagogical approach.</p>	<p>Change in maths leadership. New leadership team took part in the NCETM Teaching for Mastery Reboot</p> <p>Maths wasn't on the SDP as we had a year focused on phonics and early reading.</p> <p>Rosenshine's Principles were explored by the leadership team.</p> <p>Book Looks and monitoring were ongoing</p>	<p>Maths wasn't on the SDP as a priority BUT we entered the EXPLORE stage to ensure that future development was not based on 'assumptions'</p> <p>Two members of staff took part in a Mastery Reboot programme -Maths pedagogy and planning tool document revisited with reminders of the importance of teaching through each area of mastery – with a particular focus on Mathematical Thinking, Reset expectations around planning and use of White Rose.</p> <p>CPD to support the planning process. Using the WR as a basis but weaving in other sources too. Introduce staff to the NCETM planning tools and powerpoints.</p> <p>Provide the opportunity (possibly in above meeting or during my leadership time) for either shared planning with neighbouring year group OR with Maths Subject Leader - All staff explored the Rosenshine's Principles with many staff choosing to examine the use of vocabulary through maths – the Inquiry Question approach led to some interesting areas being uncovered including STEM sentences, vocabulary.</p>



**Our Journey Towards Conceptual Mathematics**  
**Fishbourne Church of England Primary School**

September 2024 – July 2025				
<p>Introduction of WalkThrus to support staff to deliberately practise elements of their classroom practice specifically through the lens of teaching maths.</p> <p>Deliberate vocabulary development</p> <p>Explanations</p> <p>Guided practice</p> <p>Independent practice</p> <p>Lesson study, observations and open classrooms provided quality assurance and feedback to inform the next steps for the coming year</p>				