

Implementation Audit for Maths



Key questions	How will you address this?
<p>(i) Teachers have expert knowledge of the subjects that they teach and, where they do not, they are supported to address these gaps so that pupils are not disadvantaged by ineffective teaching</p>	<p>Free, high-quality subject knowledge enhancement courses are available through a series of online webinars and remote CPD. This enthuses teachers as it is up-to-date and they can develop skills at their own pace and in areas that they need to address. Staff subject knowledge has also developed with the implementation of in-house CPD sessions on the schemes of work, delivery and implementation – focused primarily on Computer Science. Additional training from external Purple Mash trainers has also been provided. As teachers develop, there will now be a focus on computer science to programme and code across other curriculum subjects.</p> <p>Teachers encourage children in class to raise their own, develop each other's understanding as peer coaches by debugging each others algorithms and are able to use target setting procedures in class to identify talent in their group. As of 2019-20, the children receive feedback through our online platform in the form of rewards, redos of tasks and targets/challenges applied through 2dos.</p>
<p>(ii) Teachers enable pupils to understand key concepts, presenting information clearly and promoting appropriate discussion</p>	<p>Consistency in recently delivered training around lesson structure to be reinforced through further discussions and plans to teach sessions over the next 12 months.</p> <p>Vocabulary and key knowledge maps are presented to each class so that the correct language can be used. Supporting materials such as instructional videos for each session are also provided.</p>
<p>(iii) Teachers check pupils' understanding effectively, identifying and correcting misunderstandings</p>	<p>Staff are to be reminded and consolidate their understanding and use of feedback in Computing.</p>

	<p>Each piece of work is recorded and sent back electronically to the teacher where it is assessed and any corrections can be returned to the pupil. Scores and marks are automatically stored in excel documents so that teachers are able to track the progress of children. Online assessment tools are available to track children across the three areas of learning in Computing.</p>
<p>(iv) Teachers ensure that pupils embed key concepts in their long-term memory and apply them fluently</p>	<p>Staff will continue build upon concepts that were previously taught by following the long term plan. Children who are more proficient with computing are more independent and have better problem solving skills.</p> <p>The key skills planned for progressively in the Learning Ladders demonstrate a clear pathway for the children to build on prior knowledge and deepen their understanding of that concept.</p>
<p>(v) The subject curriculum that classes follow is designed and delivered in a way that allows pupils to transfer key knowledge to long-term memory; it is sequenced so that new knowledge and skills build on what has been taught before and towards defined end points</p>	<p>The teacher will set targets weekly for the class. Children can be grouped by ability and the activities that are set build up slowly in challenge, allowing for creativity once certain criteria has been met and certain skills are embedded. For example, the lesson progression on if statements will allow children full access to explore their usage by the end of a given session.</p> <p>Regular monitoring exercises such as online saved work checks, learning walks and pupil voice discussions will inform the Computing Lead's understanding of whether this progression of learning is being followed and whether training is required in this area.</p>
<p>(vi) Teachers use assessment to check pupils' understanding in order to inform teaching</p>	<p>Teachers will continue to be encouraged to implement pre-learning and then end of unit tasks in each unit of learning so clear reference points are identified to work from.</p> <p>Feedback will be delivered to children in a variety of ways. These include teachers addressing misconceptions during the Computing lessons with verbal feedback, targeted groups and peer</p>

assessment. In many instances it is encouraged that debugging occurs in the form of pupil-to-pupil feedback as this develops collaborative debugging skills.

Formative assessment strategies are used throughout the lesson to inform this feedback, including key questioning and encouraging exploration through mistakes.

Summative assessment will be assessed against the three key strands and an assessment tool is available to track progress.

(vii) Teachers use assessment to help pupils embed and use knowledge fluently, develop their understanding, and not simply memorise disconnected facts.

Teaching and learning in Maths will be planned collaboratively across year groups. Staff will be trained to use resources such as the Purple Mash Scheme of work, Scratch and Kapow. When crafting quality-first teaching, staff will also be trained to ensure that Information Technology is involved in other areas of the curriculum and Online Safety and is adhered to and taught where applicable. In many classes, particularly in KS2, children are to be trained to make selections in their learning of what task to complete. As a result of this, children will become more aware of their next steps and able to discuss a rationale why they have selected certain challenges (to either consolidate or challenge their learning).