

Computing Subject Rationale

Intent

At our school, we recognise that technology is everywhere, will play a pivotal part in our students' lives and that we are preparing them to go into jobs that do not even exist yet. We therefore want to model and educate our pupils on how to use technology positively, safely and responsibly. Our broad curriculum encompasses the three core areas of computing (computer science, information technology and digital literacy) and has cross curricular links where possible to make learning meaningful and fun.

We want our children to be skilful computer scientists who are fluent with a range of tools to best express their understanding. We hope that by Upper Key Stage 2 children have the independence and confidence to choose the best tool to fulfil the challenge set by teachers.

Implementation

To ensure continuity and progression, we follow the 'Teach Computing' curriculum which is created by experts. This is based on a spiral curriculum in which each theme is revisited regularly consolidating and building on prior learning within that theme. This style of curriculum reduces the amount of knowledge lost through forgetting as topics are revisited and built upon yearly. Children have weekly computing lessons but we encourage staff to embed computing across the whole curriculum to make learning creative and accessible.

Online Safety:

We use 'Project Evolve' lessons which are based on the statements from 'Education for a Connected World' to teach our children how to stay safe online. We know which of these statements our PSRHE curriculum touches upon and we use knowledge maps from 'Project Evolve' several times a year to help teachers identify common misconceptions in their year group. From this, teachers are able to prioritise which statements to focus on and decide this based on the needs of their year group. 'Project Evolve' provide lessons for these statements and have them organised into year group. By using and adapting these lessons, we ensure that we are teaching different aspects of online safety in each year group and we avoid repeating what has already been taught in previous year groups. Online safety is taught in a discrete lesson at the start of each half term but is also weaved

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into whole class conversations, assemblies, during online safety week and covered within the 'Teach Computing' curriculum.

Impact

Finding the right balance with technology is key to an effective education and a healthy life-style. We feel the way we implement computing helps children realise the need for the right balance and one they can continue to build on in their next stage of education and beyond. The way that pupils showcase, share, celebrate and publish their work will best show the impact of our curriculum. We also look for evidence through reviewing pupil's knowledge and skills by looking at their computing work and observing learning.

There are formative assessment opportunities in each computing lesson to ensure that misconceptions are recognised and addressed and that children get the support and challenge that they need. At the end of each unit of work there's either a multiple-choice quiz or rubric to help staff feel confident in assessing pupils' understanding. After pupils have been taught about aspects of online safety, they complete a second knowledge map to ensure there are no gaps in their understanding. If there are, this gives teachers an opportunity to address these gaps or misconceptions. Progress of our computing curriculum is demonstrated through outcomes and we record pupils' progress in achieving these outcomes on our online tracking system.