ICT Curriculum at

Gaddesden Row School

Intent

In line with the 2014 National Curriculum for Computing, our aim is to provide a high-quality computing education which equips children to use computational thinking and creativity to understand and change the world. At Gaddesden Row School, our intent is for all children to be computer **literate** and hen using programmes. The curriculum will teach children key knowledge about how computers and computer systems work, and how they are designed and programmed. Learners will have the opportunity to gain an understanding of computational systems of all kinds, whether or not they include computers.

By the time they leave Gaddesden Row School, children will have gained key knowledge and skills in the three main areas of the computing curriculum: computer science (programming and understanding how digital systems work), information technology (using computer systems to store, retrieve and send information) and digital literacy (evaluating digital content and using technology safely and respectfully). The objectives within each strand support the development of learning across the key stages, ensuring a solid grounding for future learning and beyond.

Implementation

Our curriculum aims to enable all children, regardless of background, ability, additional needs, to flourish to become the very best version of themselves they can possibly be. At Gaddesden Row School, computing is taught using a blocked curriculum approach with the support of the learning platform, Purple Mash. This ensures children are able to develop **depth** in their knowledge and skills over the duration of each of their computing topics. Teachers use 'Purple Mash' as a starting point for the planning of their computing lessons, which are often richly linked to engaging contexts in other subjects and topics. Knowledge and skills are mapped across each topic and year group to ensure systematic progression. We have Chromebooks for each class to use to ensure that all year groups have the opportunity to use programs for many purposes across the wider curriculum, as well as in discrete computing lessons. **Employing cross-curricular links when teaching computing motivates pupils and supports them to make connections and remember the steps they have been taught.**

The implementation of the computing curriculum also ensures a balanced coverage of computer science, information technology and digital literacy. The children will have experiences of all three strands in each year group, but the subject knowledge imparted becomes increasingly specific and in depth, with more complex skills being taught, thus ensuring that learning is built upon. **For example, children in Key Stage 1 learn what algorithms are, which leads them to the design stage of programming in Key Stage 2, where they design, write and debug programs, explaining the thinking behind their algorithms.**

Impact

Our approach to the computing curriculum results in a **fun, engaging, and high-quality** computing education. The quality of children's learning is evident when using Purple Mash as a digital platform where pupils can share their work with their peers and teachers. Our approach to assessment identifies children that require additional support and those who require greater depth experiences. The Purple Mash assessment tool is used to feed into teachers' future planning, and as a topic-based approach continues to be developed, teachers are able to revisit misconceptions and knowledge gaps in computing when teaching other curriculum areas. This supports varied paces of learning and ensures all pupils make good progress.

Much of the subject-specific knowledge developed in our computing lessons equip pupils with experiences which will benefit them in secondary school, further education, future workplaces and in their every day lives.

We expect all our children, irrespective of background or additional needs, to reach age-related expectation in computing and some reaching greater depth.