Computing and ICT at Parkend

**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. 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 pupils leave Parkend Primary School, they 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**

At Parkend Primary School, computing is taught weekly for 45 minutes in each class. This ensures children are able to develop depth in their knowledge and skills over the duration of each of their computing topics. Teachers use the ‘Switched On: Computing’ scheme, published by Rising Stars, as a starting point for the planning of their computing lessons, which are often richly linked to engaging contexts in other subjects and topics. We have a laptop trolley available and four class iPads, to ensure that all year groups have the opportunity to use a range of devices and programs for many purposes across the wider curriculum, as well as in discrete computing lessons. Employing cross-curricular links motivates pupils and supports them to make connections and remember the steps they have been taught.

The implementation of the 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.

The teaching of computing in Parkend Primary School is interwoven with our schools vision:

Pride ourselves = Our pupils take pride in creating their own documents, creating algorithms and taking due care when using the internet, as pupils know they represent our school.

Achieve the best we can = Children work hard to create imaginative algorithms, Power point presentations, Word Documents and are able to use the internet to research thoroughly into other areas across the curriculum. Children who need extra support are able to use programs to support their intervention in English and Maths.

Curious Thinkers = Using laptops and Ipads gives children in our small, rural school access to the wider world. Children are able to use the internet to research and learn about different subjects and topics and it encourages pupils to ask questions and develops a curiosity.

Everyone together = We support each other in school, knowing how to stay safe online and children know how to manage dangers online, preparing them to be safe and conscientious users of the internet both in Primary School and later in life.

Impact

Our approach to the curriculum results in a fun, engaging, and high-quality computing education. Evidence such as this 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 and future workplaces. From research methods, use of presentation and creative tools and critical thinking, computing at Parkend Primary School gives children the building blocks that enable them to pursue a wide range of interests and vocations in the next stage of their lives.