Otley All Saints C.E Primary School

'Learning, Love and Laughter Every Day'

Computing

Curriculum Statement: *" A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through information and communication technology – at a level suitable for the future workplace and as active participants in a digital world."*

Reference: DFE-00171-2013

Intent	At Otley All Saints CE Primary School, we recognise the importance of computing in everyday life; it has links across the whole curriculum with deep links in mathematics, science, and design and technology. Therefore, it is our aim to equip children with the relevant knowledge and skills required to explore and understand the core elements of the computing curriculum: computer science, information technology and digital literacy. We acknowledge that future generations will rely heavily on their computational confidence and digital skills both as general skills for life and in order to support their progress within their chosen career paths. Therefore, our curriculum ensures that children become proficient in using computational thinking skills and digitally literate (confident users of ICT, collaborators and developers) who are able to share work and participate safely in a digital world.
Implementation	The Sheffield Scheme for Computing forms the basis of our curriculum; it ensures both full coverage of the national curriculum objectives and the progression of skills across each age group. This allows the children to rehearse and build on skills from previous learning. Each year group has a set of key skills to be taught alongside the first unit; these are the key skills that will help pupils to use technology appropriately and effectively enabling them to use computers more independently in order to enhance learning in the wider primary.
	From Year 1 onwards, the key strands of computing are taught: computer science, information technology and digital literacy. As children move through each age phase, their subject knowledge and depth of learning in each of these areas will increase. Where possible, cross-curricular links are made with other subjects in order to give greater depth of purpose and meaningful application to topics taught.
	Specific online safety objectives are incorporated into the teaching of computing and PSHE topics for each year group with clear progression. Although computing is no longer a distinct part of the Foundation Stage curriculum, we believe teaching a well-planned computing curriculum ensures that children enter KS1 with a strong foundation of knowledge, enthusiasm and skill. Computing in our Foundation Key Stage is centred around play. Both unplugged (no computer) and digital activities focus on building children's listening skills, curiosity and creativity and problem solving. Allowing children the opportunity to explore technology in this carefree, often child-led way, means that not only will they develop a familiarity with equipment and vocabulary but they will have a strong foundation for when they begin the National Curriculum for Computing.
Impact	We encourage our children to enjoy and value the curriculum we deliver. We want learners to discuss, reflect and appreciate the impact both computing and the digital world have on their learning, development and general wellbeing. Finding the right balance with technology is key to an effective education and a healthy life-style and children at All Saints will be aware of this. They will be equipped, not only with the skills and knowledge to use technology effectively and for their own benefit, but more importantly, safely. As children become more confident in their abilities in Computing, they will become more independent and key life-skills such as problem-solving, logical thinking and self-evaluation become second nature.
	We look for evidence through reviewing pupil's knowledge and skills demonstrated in saved digital work, printed work, observations and paper based activities. These will inform teacher assessment and next steps in learning. Progress through our computing curriculum is demonstrated through outcome and also the record of coverage in the process of achieving these outcomes. This evidence is kept in shared folders on the internal school drive (S:), Gdrive or printed copies in pupil exercise books. Google Classroom is also a digital platform that we use to support our curriculum and share and collect some work, particularly in upper KS2. Age-related expectations for computing are reported to parents at the end of the school year.
Inclusion & Adaptation	An inclusive computing education curriculum should engage and inspire *all* learners to master the necessary knowledge and skills. To make it accessible for all our children, we make individualised and whole class adaptations to support their needs. We do this in a variety of ways, which includes some of the following: • Ensuring all lessons are well organised and laid out in a clear series of learning steps, starting with revisiting learning of prior knowledge. • Lessons include a mixture of experiences and different approaches to learning, including bringing abstract concepts to life through concrete resources and comparisons. • Children may be supported in tasks through the use of word banks and different levels of scaffolding (for example 'chunking' information) are used for different groups of children where necessary. Tasks can also be adapted in length with the overall outcome of learning in science remaining the same. • Active breaks may be used to help children to retain focus and attention when accessing learning. • Key vocabulary and language linking to the lesson is displayed clearly in the classroom and referred to during lessons.

| | We prioritise in-depth understanding and use routine, clarity and attention to detail. Wide range of teaching styles to support and engage such learners through visuals, videos or modelled examples. Children have the opportunity to work as a class, in pairs or small groups and with additional adults to help support working memory and learning. Colours of the screen may be adapted on different software and programs and overlays maybe used where appropriate. Our **endpoints** are aspirational for all children but success may look different. For example, an end point might be to design and create a program that uses a count-controlled loop to draw shapes. For a child who needs support with processing and recording information, this might involve using digital recording technology to capture their understanding and their plans and an adult to oversee the design of the program, following the instructions of the child. |