COMPUTING

Intent

To ensure that all children, regardless of gender, ability or background, are taught to make informed choices in order to use technology positively, responsibly and safely.

Our intent is to instil a sense of enjoyment around using technology and to develop pupil's appreciation of its capabilities and the opportunities technology offers to, create, manage, organise and collaborate. We also want to develop pupils' confidence when encountering new technology which is a vital skill in the ever evolving and changing landscape of technology. Through our curriculum, we intend for pupils not only to be digitally competent and have a range of transferable skills at a suitable level for the future workplace, but also to be responsible online citizens. Our children will be taught to use technology carefully, being mindful of how their behaviour, words and actions can affect others.

Implementation

EYFS

In the Early Years Foundation Stage, Computing is incorporated into the area of learning entitled 'Understanding the World'. Within this area, computing is developed by encouraging and supporting children to notice and explore a range of technology at school and home i.e IPads, interactive whiteboards. There is also great emphasis on internet safety, discussing how to use technology appropriately for a purpose and digital footprint.

Computing (Years 1-6)

Our learning programme enables pupils to meet the end of Key Stage Attainment targets and expectations laid out in the National curriculum (2014) and associated programmes of study.

Children study computing as a discrete subject once a week as part of their 'Specialist Subjects' afternoon. In these sessions, they follow the Kapow scheme of work which develops their knowledge, understanding and skills within the three strands of Computer Science, Information Technology and Digital Literacy with a weighted focus, informed by the balance of the National Curriculum, on computational thinking and problem solving.

The Kapow primary scheme is organised into 5 key areas: computer systems and networks; programming; creating media; data handling and online safety and ensures a broad and balanced coverage.

A robust emphasis is placed on Internet (online) Safety, with principals reinforced explicitly each half term. Children are taught to make informed choices in order to use technology positively, responsibly and safely.

Children access the learning websites used in the Kapow scheme via iPads or laptops and lessons incorporate a range of teaching strategies from independent tasks, paired and group work as well as unplugged and digital activities. This variety means that lessons are engaging.

Alongside these weekly sessions, children are encouraged to access the subscription websites such as TT Rock Stars and Nessy both in school and at home to support the development of key maths

and literacy skills.

The basic purposes and skills of computing are modelled by teachers throughout the curriculum and the three full class sets of devices are available every morning for teachers to incorporate into their planning, allowing children to explore, make links and apply their skills across the curriculum and in their daily life. Good subject knowledge is vital and teacher videos are available to support ongoing CPD.

Pupils who are confident are given the opportunity to further explore and problem solve within topics themselves and complete challenges at a greater depth.

Impact

The impact of our curriculum is monitored through formative and summative assessment opportunities. Formative assessment of children's skills and knowledge is carried out throughout the teaching cycle against the learning objectives. There are also opportunities for summative assessment through quizzes from the Kapow scheme.

Children should leave Handforth Grange equipped with a range of skills to enable them to succeed in their secondary education and be active participants in the ever-increasing digital world. They should:

* Be critical thinkers and able to understand how to make informed and appropriate digital choices in the future.
* Understand the importance that computing will have going forward in both their education and working life and in their social and personal futures.
* Understand how to balance time spent on technology and time spent away from it in a healthy and appropriate manner
* Understand that technology helps to showcase their ideas and creativity. They will know that different types of software and hardware can help them to achieve a broad variety of artistic and practical aims.
* Show a clear progression of technical skills across all areas of the National Curriculum – computer science, information technology and digital literacy.
* Be able to use technology both individually and as part of a collaborative team
* Be aware of online safety issues and protocols and be able to deal with any problems in a responsible and appropriate manner
* Have an awareness of developments in technology and have an idea of how current technologies work and relate to one another.
* Meet the end of key stage expectations outlined in the National Curriculum for Computing.