Curriculum statement for Computing

Subject aims: what do we want the children to learn and why

Through our computing curriculum at Whipton Barton we aim to give our pupils the life-skills that will enable them to embrace and use technology in a responsible and safe way throughout their life. We want the use of technology to support learning across the whole curriculum and to make sure that it is accessible to every child and every ability. We aim for children to become confident independent learners in computing. As well as teaching children the many benefits that using ICT can have, we also prepare children of the risks by ensuring we teach a clear online safety module every term and drip it in continuously throughout the year.

How the subject is organised and taught

At Whipton Barton, computing is taught once a week as a standalone skills session but is also taught through cross curricular links in many subject areas. This means that children are able to develop depth in their knowledge and skills over time. Teachers use the awarding winning 'Purple Mash' platform as a Computing scheme, which helps support their teaching and knowledge of the subject. As it is an online platform it offers children the opportunity to integrate their learning at home and school as it can be access from anywhere. It also provides teachers with clear assessment for each session taught and for the end of every half term, ensuring that teachers can track their children's progress easily. Each class in the junior school have 6 laptops and 5 ipads and in the infant school we have Microsoft tablets. This ensures 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. Using cross-curricular links in computing supports children to make connections and helps to bring computing into everyday life. Using purple mash ensures that we are offering a balanced coverage of computer science, information technology and digital literacy. The children will be taught all three strands in each year group, but the subject knowledge becomes increasingly harder as the sessions progress, thus building upon the children's foundations each year. For example, children in Key Stage 1 learn what algorithms are, which allow children the confidence to the design, write and debug their own programs in Key Stage 2. The year 6 topics touch upon what the children are expected to know in year 7, thus giving them a great foundation for high school.

What subject-specific characteristics do we want children to develop?

The ability to use technology, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concern about content and contact.

The confidence to design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

The ability to communicate ideas well by using applications and devices throughout the curriculum.

To understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration

To use technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

Select use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.