Computing

Intent

At Churchfields, we aim to deliver a high-quality computing educational journey, equipping all our pupils to use computational thinking and creativity to understand the ever-changing and developing world. Enabling them all to flourish in their journey to the fullness of life. We aim to offer a broad and exciting computing curriculum; one that caters to all our children's needs. We recognise that computing has deep links with other subjects including mathematics, science, and design & technology, and we aim to utilise this cross-curricular nature to embed pupils' learning across a range of subjects using computing as a vehicle. Computational thinking forms a large part of the computing curriculum, which means being able to solve problems, applying logic to given tasks and, in particular, programming. Our intention is for all pupils to be equipped to use information technology to embed learning, create programs, systems and a range of document types. We also aim for our teaching in computing to ensure that pupils become digitally literate – able to use, express themselves and develop their ideas through information communication technology (ICT) and above all, to understand how to use ICT safely and responsibly.

Implementation

Our curriculum is designed so that computing aids pupils' understanding of many areas of the curriculum, and discreet computing skills are taught, where appropriate. These skills are developed across the school starting in Reception where the iPads are used to introduce storytelling, maths problems and recording using photographs. Computational thinking is developed from year 1 onwards, starting with basic step by step algorithms using bee bots; developing further in Year 2 debugging given algorithms, to find problems and fixing them. The depth of these skills and this knowledge is developed in subsequent years and by year 6 pupils learn to apply coding skills to address real-life issues - they create computer games, for example, or produce films or animations. computing is strongly embedded across the broad curriculum. From Early Years through to year 6, computing skills are developed through creating presentations, word processing, computational thinking for the creation of spreadsheets, to understanding networking systems, the world wide web and, most importantly, safety when using technology. Computing and ICT is also used to help those pupils identified as having SEND or identified as needing additional support. ICT enhances learning for these pupils by helping to remove barriers that may have existed before: high-impact on-line interventions can be accessed using iPads for example, and word processing can assist those who struggle to write.

Impact

Pupils make good progress from their own personal starting points. By the end of year 6 they are able to use technology safely and responsibly and for a huge range of applications. Pupils are able to apply their understanding of computing to solve many problems, and to present themselves in a creative and stimulating way. Pupils have a strong skill set to take to high school, and the confidence to flourish in their journey to the fullness of life through their use of technology. Most importantly, pupils are able to use technology responsibly and have developed an enjoyment of learning through such technology.