Computing

Subject Lead: Miss Conlon (EYFS/KS1) and Mrs Vincent-Ellam (KS2)



Intent

St Cuthbert's Catholic Primary School believes that every child should have the right to a curriculum that champions excellence; supporting pupils in achieving to the very best of their abilities. We understand the immense value technology plays not only in supporting the Computing and whole school curriculum, but overall in the day to day life of our school. It is our intent that we provide children with the knowledge, skills and experiences they need, through a well-planned, progressive curriculum, to be successful and safe in a constantly changing technological world.

We want to provide children with a computing curriculum that is exciting, rich, relevant and challenging. Computing skills are a major factor in enabling children to be confident, creative and independent learners and it is our intention that children have every opportunity, both within computing lessons and through embedding it throughout the curriculum and school day, to allow them to achieve this. This includes children of all abilities, social and cultural backgrounds, those with disabilities, EAL speakers and SEN statement and non- statemented. Through computing, we wish to instill critical thinking, reflective learning and a 'can do' attitude for all children, so that they can become **resilient** and **confident** in their use of technology and leave primary school computer literate.

Implementation

At St. Cuthbert's Catholic Primary School, we teach the <u>National Curriculum for Computing</u>, following a scheme provided by <u>Purple Mash</u> to ensure the children gain the skills required at the appropriate age.

Our Computing scheme facilitates progression across all key stages and is broken down into three strands that make up the computing curriculum. These are Computer Science, Information Technology and Digital Literacy. The resources in the Purple Mash suite allow for teachers to teach all aspects of the National Curriculum withing the same resource.

- Computer Science underlines the knowledge and skills relating to programming, coding, algorithms and computational thinking.
- Information Technology includes the knowledge and skills relating to communication, multimedia and data representation and handling.
- Digital Literacy is an understanding of the knowledge and skills relating to online safety and uses for technology.

Units cover a broad range of computing components such as coding, spreadsheets, Internet and Email, databases, communication networks, touch-typing, animation and online safety.

Children have access to the hardware (laptops, iPads, programmable equipment) and software that they need to develop knowledge and skills of digital systems and their applications.

In **Early Years**, although computing is not taught discretely as a subject, children begin to develop their computing skills through a broad, play-based experience in a range of contexts. They use ICT scenarios based on experience in the real world, such as in role play. Children use a range of technology including the Interactive Whiteboard, Bee Bots and iPads. They gain confidence, control and language skills through opportunities to 'paint' on the interactive whiteboard or control remotely operated toys. Recording devices support children to develop communication skills; this is especially useful for our children who have English as an additional language. They access a range of age appropriate learning apps and many activities on Mini Mash.

Across school, online safety is promoted at the start of each school year, and is referred to constantly. It is taught discretely through Purple Mash units and is also embedded into the PSHCE curriculum. Issues around social media and appropriate use of computing resources including telephones is taught explicitly and may be taught/reinforced separately if a specific incident requires this. Internet safety is regularly communicated with parents and parents are informed when issues relating to online safety arise. Further information/support is always provided if required.

Impact

Through the delivery of our computing curriculum, our children will be confident users of technology, able to use it to accomplish a wide variety of goals, both in school and at home. Children will be confident and understand how to use a range of technology and computing skills; they will be equipped with the knowledge and skills they need to be ready for the KS3 computing curriculum. Majority of pupils will achieve age-related expectations in Computing, and they will be confident to apply their skills to support their work in other curriculum areas. Children will speak positively about computing and understand how computing and technology can provide opportunities for them in an ever-growing technological society and how to thrive in a technologically driven world. Most importantly, children will be able to safely manage technology, both inside and outside of school, and have the knowledge and skills to be able to responsibly respond to any dangers they potentially could face online.

Curriculum Enhancement

- Online safety talks with our local policing team
- STEM careers opportunities in Brighter Futures Week
- Digital Leaders Program (KS2)
- Computing Club (KS1)