St Cuthbert's
ROMAN CATHOLIC ACADEMY TRUST

IT

Intent, Implementation and Impact

Computing

July 2020

Intent:

All pupils at St Cuthbert's have the right to have rich, deep learning experiences that balance all the aspects of computing. With technology playing such a significant role in society today, we believe 'Computational thinking' is a skill children must be taught if they are to be able to participate effectively and safely in this digital world. A high-quality computing education equips pupils to use 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. At St Cuthbert's the core of computing is Computer Science in which pupils are introduced to a wide range of technology, including laptops, iPads and interactive whiteboards, allowing them to continually practice and improve the skills they learn. This ensures they become digitally literate so that they are able to express themselves and develop their ideas through information and computer technology– at a level suitable for the future workplace and as active participants in a digital world.

We teach a curriculum that enables children to become effective users of technology who can:

- Understand and apply the essential principles and concepts of Computer Science, including logic, algorithms and data representation;
- Analyse problems in computational term, and have repeated practical experience of writing computer programs in order to solve such problems;
- Evaluate and apply information technology analytically to solve problems; Communicate ideas well by utilising appliances and devices throughout all areas of the curriculum.

Internet Safety

St Cuthbert's Primary Academy takes internet safety extremely seriously. We have an E- Safety Policy that provides guidance for teachers and children about how to use the internet safely. Every year group participates in lessons on e-safety and children understand how to stay safe when using technology.

Implementation:

- A clear effective scheme of work provides coverage in line with the National Curriculum: Teaching and learning should facilitate progression across all key stages within the strands of digital literacy, information technology and computer science.

- Access to resources which aid in the acquisition of skills and knowledge: Children will have access to the hardware (computers, tablets, programmable equipment) and software that they need to develop knowledge and skills of digital systems and their applications.

- A clear and effective scheme of work that provides coverage in line with the National Curriculum: Teaching and learning should facilitate progression across all key stages within the strands of digital literacy, information technology and computer science. Children will have the opportunity to explore and respond to key issues such as digital communication, cyberbullying, online safety, security, plagiarism and social media.

Wider Curriculum: Opportunities for the safe use of digital systems are considered in wider curriculum planning.

Displays: The importance of online safety is shown through displays within the learning environment.

Parental Communication: Parents are informed when issues relating to online safety arise and further information/support is provided if required.

Safer Internet Day: As well as opportunities within the scheme of work, children will also spend time further exploring the key issues associated with online safety.

Impact:

- Our Computing curriculum is high quality, well thought out and is planned to demonstrate progression. If children are keeping up with the curriculum, they are deemed to be making good or better progress. In addition, we measure the impact of our curriculum through the following methods:

- A reflection on standards achieved against the planned outcomes

- Children can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation;

- Children can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems;

- Children can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems;

- Children are responsible, competent, confident and creative users of information and communication technology.

- A celebration of learning for each term which demonstrates progression across the school;

- Pupil discussions about their learning;