Unlocking….

Minds that learn, Hearts that love, Faith that gives

Subject Intent, Implementation and Impact

Subject	Subject Lead	Scheme
Computing	Laura Edwards	St Peter's

Computing Intent

In an increasingly digital world it is vital that children understand and use computing skills. Children are being exposed to computing earlier and more frequently and, without basic skills, they may find their options as adults are reduced. The national curriculum states that the core of computing is computing science and we want our pupils to be proficient in the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Equally as important at St Peter's though is the teaching of e-safety so that children know how to keep themselves safe and communicate appropriately and positively online. Pupils use Computing tools to find, explore, analyse, exchange and present information responsibly, creatively and with discrimination. They learn how to employ Computing strategies to enable rapid access to ideas and experiences from a wide range of sources. Our vision is for all teachers and learners in our school to become confident users of Computing technology so that they can develop the skills, knowledge and understanding which enables them to be confident, creative and independent learners.

Computing Implementation

We teach computing using the 123 ICT scheme of work, supplemented by units from the National Centre for Computing Education. The implementation of our curriculum ensures that children receive a balanced coverage of computer science, information technology and digital literacy. The children experience all three strands in each class, but the subject knowledge imparted becomes increasingly specific and in-depth, with more complex skills being taught, thus ensuring that learning is built upon. The school uses a progression map to ensure that the children are receiving a breadth of knowledge across all strands of computing (online behaviours, computational thinking, data handling and e-safety). The progression map also ensures children are being moved forward in their skills to become competent computer users and develop a mastery of skills within their year group.

Our Computing curriculum increases children's digital literacy through giving children opportunities to develop Computing skills that can be thoughtfully applied in a range of situations. We provide with children with opportunities to developing increasing independence in the choices they make over which technology to use to help them reach the desired outcome. As they progress through KS1 and 2 children will become increasingly confident in the application of their digital skills, developing as efficient and effective communicators, collaborators and analysts, showing imagination and creativity in their use of Computing in

different aspects of their learning. The coverage of each area will vary by year group, with some areas being covered primarily in KS1 and others primarily in KS2.

Through our computing curriculum, children's development of digital literacy is underpinned through the expectation that, as well as receiving weekly lessons in computing each half-term, pupils are able to use and apply their Computing skills in multiple areas of the curriculum. Teachers will plan for technology to be used as a day-to-day element of school life and across the curriculum, therefore if opportunities to use ICT arise which do not fall within the Computing curriculum for each year group they should be taken advantage of.

Lessons provide children with opportunities to build the knowledge and understanding of how technology works. This extends from learning how things work by establishing that there is 'something inside' a piece of technology to make it work (EYFS), progressing through KS1 and KS2 to children creating their own simple programs including games, utilities and applications with exposure to computer codes and scripts. The emphasis on programming increases as children move through the school.

A key element of the curriculum at St Peter's is the teaching of E-safety. In Key Stage 1, children are introduced to four rules of internet safety and the SMART principles of e-safety build on this knowledge in every year of the Computing curriculum. Additionally, the school has a separate E-Safety policy, and E-Safety sessions will take place regularly in each year group as part of both Computing and PSHE sessions.

What is the impact of our computing teaching?

Throughout each unit of work, teachers assess the children's knowledge and understanding. This enables them to provide additional support in the moment, helping the children understand the areas of the curriculum which they find most challenging.

Much of the subject-specific knowledge developed in our computing lessons equips pupils with experiences which will benefit them in secondary school, further education and future workplaces. From research methods, use of presentation and creative tools and critical thinking, computing at St Peter's will make children competent and confident digitally literate individuals, giving them the building blocks which will enable them to pursue a wide range of interests and vocations in the next stage of their lives.