ST PETER'S CHURCH OF ENGLAND PRIMARY SCHOOL

'In Jesus, we learn, live and grow together'

Be The Good Soil (Mark 4: 1-20)

Curriculum Intent, Implementation and Impact for Computing

Computing Curriculum Intent

Computing at St Peter's Church of England intends to develop 'thinkers of the future' through a modern, ambitious and relevant education in computing. We want to equip pupils to use computational thinking and creativity that will enable them to become active participants in the technological world. Our pupils are taught to understand the responsibilities of using technology in everyday life, whilst ensuring they are aware of the advantages and disadvantages associated with online experiences. We want our pupils to be confidently aware of measures that can be taken to keep themselves and others safe online.

The children at St Peter's learn a range of valuable skills to ensure they have a broad range of confidence and experience in technology. These skills include: use of algorithms, debugging of programmes, use and combine a variety of software and have a deep understanding of the necessity of safety online. In EYFS the children learn basic skills with computers and other electronic devices. As the children progress through the years, their learning develops deeper into coding and other essential skills in the 21st century. Throughout each key stage the learning will always build upon what the children have learned previously and prepare them for their future learning. As well as developing children's knowledge of computers, we believe that it is important for children to understand how technology influences our lives today. Computing also gives the children opportunities to practise and apply key skills in speaking and listening, reading, writing and numeracy.

Throughout their learning, children of all ages develop their technological skills. The children will be exposed to a breadth of relevant and appropriate vocabulary to express methods and understanding of their computing skills. During their time at St Peter's the children will be provided with the opportunity to pose their own questions about their learning and follow their lines of enquiry to reach the answer. Throughout each topic, we will develop links between prior knowledge and E-safety to ensure clear progression through the year groups.

We will deliver a curriculum that:

- Effectively and competently apply all aspects of Computer Science; including programming, algorithms, debugging and communication networks.
- Use computational thinking to analyse and solve problems.
- Safely and respectfully, use the internet and understand what to do and where to go if they have concerns about the internet or other online technologies.
- Use search technologies effectively to select relevant content from a ranked list.
- Communicate and present their ideas using a variety of Information Technology that support roots in school's broader curriculum.

- Celebrates the ever-changing technology of our modern world and uses this to express themselves as a means to drive their generation forward into the future.

Computing Curriculum Implementation

At St Peter's we provide Opportunities for children to access technology in all areas of the curriculum. We have a magnificent computing suite equipped with 30 computers, headphones and a new interactive white board. Each year group has 16 iPads and each Key Stage has a laptop trolley with 16 laptops. Pupils are given the opportunity to present their learning in creative and expressive ways through the use of technology in all aspects of school life. Pupils are often given homework relating to research to consolidate their learning in other subjects.

- Miss J Seasman who will monitor, evaluate, review and celebrate good practice oversees the computing curriculum.
- St Peter's follows the Switched On Computing – Rising Stars scheme which provides coverage in line with the National Curriculum.
- Computing is delivered in a one-hour lesson per week; however, use of laptops, iPads and other technological devices are frequently used in all subjects.
- Computing lessons will build upon prior learning and develop skills year upon year.
- The importance of online safety is shown through displays within the learning environment and computer suite.
- Parents are informed when issues relating to online safety arise and further information/support is provided if required.
- As well as opportunities underpinned within the scheme of work, children will also spend time further exploring the key issues associated with online safety.
- In computing lessons, children use desktop computers in the Computing Suite which allows them to practice basic mouse and keyboard skills in each session.

In addition:

- The computing subject leader will be given training and the opportunity to keep developing their own subject knowledge, skills and understanding, so they can support curriculum development and their colleagues throughout the school.
- Miss J Seasman will attend computer network meetings half termly to discuss good practise with local computing subject leaders.
- Assessment of computing will be in line with the whole school feedback policy and teachers will assess progress and attainment of computing.

At St Peter's Primary School, our computing curriculum is designed around the four key areas, as outlined in the National Curriculum. These are computer science**,** information technology**,** digital literacy and online safety**.** The combination of these areas equips our children with the ability to safely and confidently use a computer. The children will have experiences of all four strands in each year group, but the subject knowledge imparted becomes increasingly specific and in depth, with more complex skills being taught, which ensures learning is being built upon. Our children begin their journey with technology in Early Years, with access to iPads and BeeBots. Teachers facilitate children's curiosity with challenge and modelling how to use the equipment carefully and safely. In the computing suite they improve their mouse control and learn how to log on and off a computer

using their own username and password. They learn about online safety and what to do if they encounter something which makes them feel uncomfortable.

Computing Curriculum Impact

Switched On Computing offers many ways to track the impact of computing lessons on pupil's learning. Each unit includes a comprehensive list of differentiated learning outcomes, making it easy for teachers to check where pupils' work fits with a set of age-related expectations. It is a brilliant way for pupils to build up a portfolio of their creative work demonstrating how their skills and their thinking have developed over their years at St Peter's Primary School.

Our approach to the curriculum results in a fun, engaging, and high-quality computing education. The quality of children's learning is evident on our Shared Drive. Much of the subject-specific knowledge developed in our computing lessons equip pupils with experiences, which will benefit them in secondary school, further education and future workplaces.

Computing at St Peter's develops pupils'…

- understanding of the responsibility to follow online safety rules;
- understanding of algorithms, how they are implemented as programmes on digital devices;
- ability to create and debug simple programs;
- use search technologies effectively.

Computing at St Peter's encourages pupils to…

- understand and apply the fundamental principles and concepts of computer science;
- use technology purposefully to create, organise, store, manipulate and retrieve digital content;
- use technology safely and respectfully;
- analyse problems in computational terms;
- use logical reasoning to predict the behaviour of simple programs
- select, use and combine a variety of software (including internet services) on a range of digital devices.

Computing at St Peter's enhances pupils'…

- to recognise common uses of information technology beyond school;
- use logical reasoning to predict the behaviour of simple programs;
- to appreciate the variety of skills developed with the use of technology;
- enjoyment in developing their computational thinking in the technological world.

Computing at St Peter's offers…

- pupils to be responsible, competent, confident and creative users of information and communication technology.
- opportunities to frequently use a variety of technology in all subject areas.