Curriculum Intent and Implementation - Computing

School Curriculum Intent

At St Peter's, every child will live, love and learn in an environment founded upon moral and Christian values; they will leave the school with the knowledge and skills to be lifelong learners and rounded citizens and with the ability to make a positive contribution to their future society.

All that we do is founded upon a clear set of shared values, from which our motto is derived: Together We Believe, Aspire And Achieve

Subject Curriculum Intent

At St Peter's CE we aim to give our pupils the life-skills that will enable them to embrace and utilise new technology. Technology is everywhere and will play a pivotal part in their lives. We want to model and educate our pupils on how to use technology positively, responsibly and safely. We want our pupils to understand that there is always a choice with using technology and as a school we utilise technology to model positive use. We recognise that the best prevention for a lot of issues we currently see with technology/social media is through education. Building our knowledge in this subject will allow pupils to effectively demonstrate their learning through creative use of technology

We recognise that technology can allow pupils to share their learning in creative ways. We also understand the accessibility opportunities technology can provide for our pupils. Our knowledge rich curriculum has to be balanced with the opportunity for pupils to apply their knowledge creatively which will in turn help our pupils become skillful computer scientists. We encourage staff to try and embed computing across the whole curriculum to make learning creative and accessible. We want our pupils to be fluent with a range of tools to best express their understanding and hope by Upper Key Stage 2, children have the independence and confidence to choose the best tool to fulfil the task and challenge set by teachers.

Threads of the subject

Through the study of Computing, children will be able to develop a wide range of fundamental skills, knowledge and understanding that will actually equip them for the rest of their life. Computers and technology are such an integral part of everyday life that our children would be at a disadvantage would they not be exposed to a thorough Computing curriculum. Children must be taught in the art form of 'Computational Thinking' in order to provide them essential knowledge that will enable them to participate effectively and safely in the digital world beyond our gates.

What a child experiences in this subject going through St Peter's

In Key Stage 1, the children will learn to understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. They will be taught to create and debug simple programs. They will use a range of technology purposefully to create, organise, store, manipulate and retrieve digital content. They will be taught to use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content.

In Key Stage 2, the children will design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by breaking them into smaller parts. They will use sequence, selection, and repetition in programs, use logical reasoning to explain how some simple algorithms work and correct errors in algorithms and programs. Children will be taught to understand computer networks, including the internet, and the opportunities they offer for communication and collaboration. They will use search technologies effectively, learn to appreciate how results are selected and ranked, and be discerning in evaluating digital content. Children will be taught to select, use and combine a variety of software (including internet services) on a range of digital devices to create a range of programs, systems and content that accomplish given goals. They will use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour and identify a range of ways to report concerns about content and contact.