

Computing Intent, Implementation & Impact

Vision – The St Nicholas C of E Primary School curriculum provides a **hands on, investigative approach** with **memorable moments** and **challenge for all**. Through this, children develop **high expectations** and **aspirations** for themselves, **curiosity** and a passion to drive their own learning. Our values and moral code underpin an **ethos of care** within our **safe, nurturing environment**. We provide a **journey of learning** whilst developing each child holistically and recognising the uniqueness of every individual learner.

Intent

At St Nicholas CofE Primary School, our computing curriculum is designed around computer science, information technology, digital literacy and online safety; the four key areas outlined in the National Curriculum. Together, these provide our children with the ability to both safely and confidently use a computer.

As technology is always evolving we want our children to understand the potential it has, and start to build computing skills for the future. At St Nicholas, we aim to develop pupils who can use, express, and develop their ideas through information and communication technology at an appropriate level for the future work place and as active participants in a digital world. Our Computing curriculum allows children to become “computational thinkers”, tackling complex problems, making mistakes and learning from them. It also engages our children through the creative use of technology. We teach them to become good digital citizens, to know how to stay safe and keep others safe online by questioning the validity of what they read and see, and the importance of what they share in creating their own digital footprint.

Implementation

To ensure high standards of teaching and learning in Computing, we implement a curriculum that is progressive throughout the whole school, by using and following the ‘Teach Computing’ scheme of work through Years 1-6. The Computing lessons are divided into four separate strands; Computing Systems and Networks, Creating Media, Data and Information, and Programming. These four core strands are the backbone of each Year group, allowing the children to make links to prior learning and the opportunity to progress, develop, and embed skills.

The Computing learning journey at St Nicholas starts in Early Years, with access to a wide range of different technology including iPads, laptops, and Code-A-Pillars. Through creative and inspiring use of these, teachers facilitate children’s curiosity with challenge and modelling how to use the equipment carefully and safely.

In KS1 children continue their journey by developing their coding skills working with BeeBots, using them more precisely. They learn how to programme a BeeBot to reach a destination and begin to be able to debug when something doesn’t work out the way they imagined. Coding then progresses from BeeBots onto using Scratch Junior, a computer-based programme where children learn how to programme a variety of sprites. They begin to identify technology around us, using digital devices to create a variety of media. They learn about online safety and what to do if they encounter something which makes them feel uncomfortable as well as what personal information is and why it is important we don’t share it with someone on the internet.

In KS2, children continue this coding journey, not only making the sprites move, but interact with each other. As children progress up KS2 the coding becomes more complex and they are able to create basic games with code. Their digital literacy skills are combined with English, Science, History

and Geography where work is word processed and presentations are created using PowerPoint. Children learn how to use the hardware we have in school including webcams, where they are taught how to take and manipulate pictures, showing them that what they view in the media isn't always accurate. The children are also taught internet safety throughout each year of KS2. They know how to keep themselves safe online and what to do if they come across something that makes them uncomfortable.

Impact

Within Computing we encourage a creative and collaborative environment in which pupils can learn to express and challenge themselves. Children will have developed the knowledge, skills and understanding to help them access and use a range of technology in a safe and creative way and to use computational thinking and creativity. They will have developed skills to express themselves and be equipped to apply their skills in computing to different challenges going forward. Children's skills will have progressed to enable them to not only have met the requirements of the National Curriculum but to also enjoy using technology to develop knowledge and ideas as well as express themselves safely and creatively as responsible citizens.

The success of the curriculum itself will be assessed via the analysis of yearly progress data on Insight, conducting regular pupil interviews and lesson observations. This will then inform future adaptations of the schemes of work and help to ensure that progression is evident throughout school.