Computing

Intent

At Stanton St Quintin Primary School we aim to prepare children with the knowledge, skills and understanding they need to thrive in the digital world of today and the future. The computing curriculum seeks to develop

- Competence in coding for a variety of practical and inventive purposes, including the application of ideas within other subjects.
- The ability to connect with others safely and respectfully, understanding the need to act within the law and with moral and ethical integrity.
- An understanding of the connected nature of devices.
- The ability to communicate ideas well by using applications and devices throughout the curriculum.
- The ability to collect, organise and manipulate data effectively

Implementation

The curriculum can be broken down into 3 strands: **computer science, information technology and digital literacy**, with the aims of the curriculum reflecting this distinction.

The national curriculum for computing aims to ensure all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation (Computer science)
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems (Computer science)
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems (Information technology)
- are responsible, competent, confident and creative users of information and communication technology. (Digital literacy)

The school uses **Barefoot** resources to teach the key stage 1 and 2 computing curriculum. These are often taught in block units to build on prior learning and accelerate progress. Barefoot resources are cross-curricular, making a broad range of links with other subjects.

The school uses the SWGFL Online Digital Literacy and Citizenship to teach pupils Digital Literacy. The skills in the digital literacy include: Internet Safety, Privacy and security, cyber bullying, relationships and communication, digital footprints, self-image and identity, information literacy and creative credit and copyright. Digital literacy is taught at the beginning of every term and each year ….we Safer Internet Day.

Pupils are given opportunities to communicate their learning through the use of Information Technology e.g. using iPads to create IMovie's. Within lessons, pupils are encouraged to evaluate their own choices and the choice of others when using information technologies.

From EYFS, pupils are presented with numerous opportunities to use technology. They are encouraged to interact and explore their environment using a range of multimedia equipment including I pads. Exploratory play with electronic toys, onscreen activities and simple control devices are encouraged. Pupils will discuss electronic equipment in real life situations and investigate how they work. Pupils will understand how batteries make electronic toys work and how the school environment has utilised technology. Pupils will begin to sort, group and classify objects using ICT.

Impact

Pupils are assessed against Milestones at the end of EYFS, Key Stage 1 and Key Stage 2. They are broken down into 4 key concepts.

- Code - This concept involves developing an understanding of instructions, logic and sequences.
- Connect - This concept involves developing an understanding of how to safely connect with others.
- Communicate - This concept involves using apps to communicate one's ideas.
- Collect - This concept involves developing an understanding of databases and their uses.

The computing curriculum is enhanced beyond requirements with Sphero Workshops where pupils use coding to solve complex puzzles.