South Hill Primary School – Computing overview

School vision

All pupils at South Hill flourish through a nurturing environment, which builds confidence and resilience and a lifelong love of learning

Computing vision

For pupils to be equipped to navigate a digital world and to understand how to protect themselves online.

To develop pupils confidence and capability in IT and programming to prepare them for a rapidly changing technological world.

Intent

At South Hill, we follow the National Curriculum for Computing and use the NCCE Teach Computing curriculum, which incorporates skills and progression across the school.

Our intent is to deliver a Computing curriculum to:

- **Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.**
- **Enthuse and equip children with the capability to use technology throughout their lives.**
- **Give children access to a variety of high quality hardware, software and unplugged resources.**
- **Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.**
- **Provide technology solutions for forging better home and school links.**
- **Utilise computational thinking beyond the Computing curriculum.**
- **Exceed the minimum government recommended/statutory guidance for programmes of study for Computing and other related legislative guidance (online safety).**
- **To prepare pupils to live safely in an increasingly digital British society.**

The sequence for our Computing topics, showing our progression of skills and knowledge throughout the school, are mapped out in our:

- **Computing action plan**
- **Computing Knowledge organisers**
- **Computing progression document**
- **Computing Topic overview**
- **Computing Subject policy**

Implementation

In the EYFS, the building blocks to Computing are taught through:

- **Communication and Language**
- **Personal, Social and Emotional Development**
- **Understanding the World**

In Key Stage 1, pupils should be taught to create and debug simple programs and use logical reasoning to predict the behaviour of simple programs. They should use technology purposefully to create, organise, store, manipulate and retrieve digital content as well as recognise common uses of information technology beyond school. All children will learn how to use technology safely and respectfully and know whom to contact if they are concerned.

In Key Stage 2, pupils should be taught to design, write and debug programs and solve problems by decomposing them into smaller parts. They should use sequence, selection, and repetition in programs; work with variables and various forms of input and output. They will use logical reasoning to explain how some simple algorithms work and to detect and correct errors in programs. The will develop their understanding of networks and the internet as well as use search technologies effectively. They will develop how to select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs and systems. They will continue to build upon the safe use of technology developed in KS1.

Teaching and learning sequence for Computing

Inspire/ Cultural capital

- Hook/ inspiration lesson to immerse the children in their new topic or to end a topic and to promote a love of learning and love of Computing itself
- Links to local, national and global knowledge of the world to ensure children know their place within it

Fieldwork and Enquiry

- Fieldwork and trips to inspire learning and give 'hands on ' computing experiences
- Encourage the pupils to be curious, critical thinkers through open ended tasks and questions
- Encourage the children to care about the environment

Clear learning journey

- A clear learning journey(Knowledge organisers), from EYFS to Year 6, where skills and knowledge and build upon continually
- Revisit learning regularly to ensure children can make links between different topics covered and so they can commit this to their long term memory

Application

- Mastery curriculum where pupils deepen and develop their understanding
- Pupils acquire skills and knowledge to understand, present, analyse and communicate a range of information

In every lesson, teachers will:

- **Ensure lessons are accessible for all pupils**
- **Promote British values**
- **Use regular 'Assessment for learning'**
- **Make use of excellent quality texts**
- **Create a rich vocabulary environment**

Impact

Pupils will be assessed by teachers reviewing skills and knowledge (from the Computing scheme of work). This will be recorded termly using our 'Foundation assessment tracker'.

Pupils will have developed age appropriate knowledge and skills in order to help them understand:

- How to form positive relationships
- How to have a healthy lifestyle

Pupils will understand that all children and adults should be valued and treated equally.

The impact of the Computing curriculum will be evidenced through continuous and effective monitoring by the subject leader and SLT, through:

- **Computing Action plan**
- **Learning walks**
- **Pupil voice**
- **Staff voice**
- **Parent voice**
- **Lesson studies**
- **Book scrutiny**
- **Staff CPD**
- **Effective planning**
- **Computing Knowledge organisers**