

Sutton in Craven C.E (V.C) Primary School

Computing Curriculum Statement



Flourish together, in the love of God, to live life in all its fullness.

Rationale

At Sutton in Craven C.E. Primary School, we believe that every child should have the right to a curriculum which is progressive like the subject itself and provides challenge to all of our children. We understand the immense value technology plays in supporting the Computing Curriculum and other curriculum subjects. We aim to provide an engaging, inspiring and challenging curriculum which will enthuse and equip children with the capability to use technology well throughout their lives.

Curriculum Intent

During their time at Sutton C of E Primary school we aim to develop children's understanding of technology through a progressive curriculum with a programmes, devices and experiences. As the curriculum states, our teaching is focused so children can understand and apply the fundamental principles and concepts of computer Science. Our computing curriculum is separated into three key themes: Abstraction and Logic, Algorithms, Data representation. Due to its increasing importance, online safety is woven into all computing lessons but also given discrete teaching time each half term.

By the end of EYFS children will be able to -

Recognise that a range of technology is used in places such as homes and schools and select and use technology for particular purposes. They have access to a range of technology within daily provision and also are exposed to focused, skill based sessions.

By the end of Key Stage 1 children will be able to -

Children will use a range of technology purposely to create, organise, store, manipulate and retrieve digital content. They will build on their EYFS learning by recognising common uses of information technology beyond school. Children will begin to understand what algorithms are, how they are implemented as programmes on digital devices and that programmes execute by following the precise and ambiguous instructions.

From this:

- They will create and de bug simple programmes with a mixture of resources.
- They will use technology purposely to create, organise, store, manipulate and retrieve digital content.
- They will learn how to use technology safely and respectfully, keeping personal information private, identify where to go for help and support when they have concerns about content or contact on the internet or other online technology.

By the end of Key Stage 2 children will be able to -

Children will continue to use a range of technology with developing confidence. They will use sequence, selection and repetition in programmes; which work with variables and various forms or input and output.

Building on their Key Stage 1 algorithm work, children will use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programmes.

Children will select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programmes systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Children will continue to be taught how to use technology safely, respectfully and responsibly; recognise acceptable and unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Curriculum Implementation

Computing is a foundation subject so is taught weekly, or sometimes fortnightly, depending on the current topic and time required for the other foundation subjects. This allows them sufficient time to become fluent in their knowledge and skills. With our curriculum being split into three key themes over the three termed year children have time to recall, learn and develop skills through a range of skill based lessons and themed challenges.

Enrichment

As a school, we understand that the technologies and taught skills within our computing curriculum can be used in a cross curricular way. We plan to allow children the opportunity to use hardware, such as laptops and digital cameras, as often as possible in a range of lessons.

We use the Microsoft Teams platform for homework and home learning. Our children are confident at using the platform safely and enjoy completing homework and seeing feedback from their teachers.

Assessment and Impact

Lessons are planned around the outcomes of the progression of skills document and National Curriculum. Children are assessed through a process of ongoing formative assessment, where individual teachers are able to pick out through careful monitoring, which skills and knowledge children have achieved and which areas may need more attention in future lessons.

The subject leader monitors the effectiveness of Computing teaching through a cycle of pupil interviews, staff questionnaires, learning walks, evidence file dips and planning scrutiny. This monitoring cycle allows the subject leader to make any necessary changes to the planning, implementation and assessment of Computing within school and to update the action plan. The subject leader keeps up to date with curriculum changes and new technologies through training and research. This information is then fed back to staff through CPD.