



Hill Farm Primary

Computing Policy

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Review Cycle	Every two years
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Policy approved by	Ruth Winters
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Introduction

The use of information and communication technology is an integral part of the national curriculum and is a key skill for everyday life. At Hill Farm Primary School, we recognise the importance of providing pupils with the necessary skills to become digitally literate and to participate fully in the modern world. Computers, tablets and a range of other devices are used to store, acquire, manipulate, organise, interpret, communicate and present information. We recognise that pupils are entitled to a broad and balanced computing education with a progressive and structured approach to learning about computer science, information technology, digital literacy and online safety.

The school's aims are to:

- Provide a broad, challenging and enjoyable curriculum for pupils, meeting the requirements of the national curriculum programmes of study for computing
- Respond to new developments in technology, providing pupils with quality and up-to date hardware and software
- Equip pupils with the necessary skills and confidence to use digital tools and technologies throughout their lives safely and responsibly
- Provide staff with the means and training to optimise their use of ICT and extend this to other curriculum areas

The national curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems

- are responsible, competent, confident and creative users of information and communication technology

Rationale

The school believes that information technology, digital literacy and computer science:

- are crucial life skills necessary for pupils to fully participate in a modern digital world
- can inspire, motivate and enthuse pupils to create digital content rather than to simply consume it
- provides opportunities for collaboration and communication through group working
- meets the individual needs and abilities of each pupil
- presents information in new ways, helping pupils to understand, access and use it more readily

Objectives Key Stage 1

By the end of Key Stage 1, pupils will be taught to understand what algorithms are and how they can be implemented as programs on digital devices such as tablets. Pupils are taught that programs are a set of precise instructions given to complete a task. They will be provided with opportunities to explore this concept practically, through programming their own robots, and will be encouraged to write, test and debug their own simple programs, using logical reasoning to predict the behaviour of these. Pupils will use a range of apps, websites and programs to create, store, manipulate and retrieve data in a range of digital formats. They will use technology to tell stories, create pictograms, graphs and art, and to develop their typing skills, recognising common uses of technology beyond school. They will become experts at understanding how to communicate safely and respectfully online and to keep personal information private.

Key Stage 2

By the end of Key Stage 2, pupils will have designed and written programs with a purpose to accomplish specific goals. They will be competent at using sequence, selection and repetition in their programs, working with variables and various forms of output and input. Pupils will use logical reasoning to explain how a simple algorithm works and will test programs to detect and correct errors. They will understand how computer networks including the internet work, recognising how they can provide multiple services such as the world-wide web and opportunities for communication and collaboration. Pupils will understand how internet search engines find and store data and will use search engines effectively to evaluate and discuss digital content. They will use a variety of software to accomplish given goals including collecting, analysing and presenting data and information. Pupils will be taught to use technology, including the internet, safely, securely and responsibly and will become aware of up-to-date terminology including phishing, virus and spyware. Pupils will be taught strategies to overcome any difficulties they encounter online.

Planning and Evaluation

The Teach Computing curriculum is designed to respond to the aims of the national curriculum and provides activities which enable children to develop their digital literacy, information technology and computer science skills.

Medium and short term planning is completed by the computing subject lead and a subject expert from the Teach Computing team. This is shared with class teachers. Planning for teaching is regularly reviewed in response to evaluation and pupil questionnaires and, as far as possible, developments in ICT in wider society. Specific learning activities are planned

and developed in response to ongoing CPD undertaken by the coordinator and as pupil capability advances through specialist teaching. As well as planned activities, children are also encouraged to use computing devices spontaneously and independently to enhance their learning across the curriculum.

Assessment

Pupils' understanding is checked systematically and effectively in lessons. We provide children with verbal feedback about what they can do to improve their knowledge, understanding and skills. This informs the computing curriculum for the following year and supports teachers in adapting medium and short term planning.

Security

The computing technician will be responsible for frequently updating anti-virus software onto computers, laptops and iPads. All use of ICT and computing equipment will be in line with the school's 'acceptable use policy' that is signed by all staff, volunteers and pupils. All pupils will be aware of the school rules for responsible use of technology and will understand the consequences of any misuse. The agreed rules for safe and responsible use of technology and the internet will be displayed in the ICT suite and discussed frequently during computing lessons.

Monitoring

The subject leader is responsible for monitoring the standard of the children's work and the quality of teaching. The subject leader is also responsible for supporting colleagues in the teaching of computing, for being informed about current developments in the subject, and for providing a strategic lead and direction for the subject in the school.