



Computing Policy

Leadgate Primary School



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Agreed by:	
HT: <i>Mr Watson</i>	Date:
Staff: _____	Date: _____
Governors: _____	Date: _____
Date for review:	



Computing Policy

Purpose

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, express themselves and develop their ideas through information and communication technology – at a level suitable for the future workplace and as active participants in a digital world. (The National Curriculum, DfE, 2013)

Aims and Objectives

The National Curriculum aims ensure that all pupils are taught the following:

	Key Stage 1	Key Stage 2
Computer Science	<p>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</p> <p>Create and debug simple programs</p> <p>Use logical reasoning to predict the behaviour of simple programs</p>	<p>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>Understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web</p> <p>Appreciate how search results are selected and ranked, and be discerning in evaluating digital content</p>



	Key Stage 1	Key Stage 2
Information Technology	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Use search technologies effectively 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, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
Digital Literacy	Recognise common uses of information technology beyond school 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 technologies	Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Early Years Foundation Stage

Although there is no separate Technology strand in the EYFS curriculum, computing activities can enhance indoor and outdoor provision and contribute to the Characteristics of Effective Learning, as children are active, play and explore, and think critically and creatively.

Computing is not just about computers. Computing scenarios may be based on experiences in the real world in role play, using remote controls and cameras. Playing with toys like BeeBots teaches programming. Resources such as Smartie the Penguin introduce children to online safety.

Planning

A long term plan for Computing has been produced by the Computing Coordinator to demonstrate coverage and progression. This follows the Teach Computing framework for Key Stages 1 and 2 and includes age-appropriate online safety weblinks.



Computing is a discrete subject, but it is also used to support learning in other subjects, such as when using research and presentation software.

The school PSHE syllabus also includes opportunities to explore online safety issues.

Teaching and Learning

Children may be required to work individually, in pairs or in small groups, or as a class, according to the learning objective.

Resources

The Computing Coordinator oversees computing resources.

- Early Years classes may incorporate technology within different learning areas.
- Each site has central stores of resources, including trolleys for iPads and laptops, programmable toys (BeeBots, Probots), and microphones.
- Laptops are networked.
- A technician visits school every fortnight to work on each site.
- All staff are able to log any necessary work using county ICT services online, although this is usually done by the Coordinator.
- Online resources also support home learning, such as 'Class DoJo' and 'Purple Mash'. *Please refer to the school's Remote Learning Policy.*

Health and safety

Pupils and staff are instructed to avoid looking at a projector or visualiser and each whiteboard has a warning sign on display. Trailing leads should be made safe behind equipment. Children are taught about the safe and appropriate use of electrical equipment, such as laptops.

Staff and visitors are advised not bring their own electrical equipment into school as all electrical appliances need to be PAT tested every twelve months. Damaged equipment is reported to the office for repair or disposal.

Use of computing equipment is in accordance with the school's 'acceptable use'.

Online Safety

Rules for safe and responsible use of the Internet is displayed next to all computing area. *Please refer to the school's Online Safety Policy.*

Mental health and wellbeing

As well as learning about the benefits of technology, pupils consider the impact of excessive screen time and negative content online, and explore issues such as cyberbullying also during PSHE lessons. They learn about age restrictions and how to manage risks through safe searching, keeping personal information private, behaving respectfully online, and finding out how to get support.



Equal Opportunities

Computing is for all children, irrespective of their gender, ethnicity, culture, religion, background, experience or ability.

Special Educational Needs and Disabilities

We strive to meet the needs of all children, so that they can meet their potential. Activities or resources may be adapted for different needs, and additional adult support given.

The use of computing can have an impact on the quality of work that children produce and can increase confidence and motivation. Future staff training aims to improve familiarity with assistive technology.

More Able and Talented

Pupils will be offered greater challenge with opportunities for investigation, problem solving, and creativity.

The Computing Coordinator will liaise closely with the SENDCo (Special Educational Needs and Disabilities Coordinator) and the More Able and Talented Coordinator to ensure that children have appropriate access to computing, including provision of appropriate equipment or support where possible.

Assessment

Specific feedback from adults helps pupils to improve. Photographs of children's activities and print-outs of their work provide evidence to demonstrate achievements and progress. Work may also be saved on the computer network and in 'Purple Mash', and as children progress through the school, they are taught how to save their own work.

Role of the Computing Coordinator

- To implement the school policy
- To attend courses and update staff with current developments and CPD opportunities
- To liaise with county services, such as technicians and web developers
- To monitor and evaluate the effectiveness of school provision and purchase resources
- To support staff and lead any meetings and training
- To report to the Head Teacher and the Governing Body

Monitoring and Review

The Computing Coordinator is responsible for the monitoring and review of the Computing Policy.