Mauldeth Road Primary School

Draft Computing Policy 2017

Introduction

The range of digital devices that we now all use are shaping and changing almost every aspect of our society. It is essential that children develop a positive attitude to technology so that they can adapt readily to innovation and change. It is important that they see devices as tools that they can employ creatively, developing their own algorithms and codes rather than as a means of delivering fairly fixed content to relatively passive end-users.

We aim to:

•	Provide a relevant, challenging and enjoyable curriculum for computing
•	Deliver national curriculum programmes of study for computing.
•	Use computing as a tool to enhance learning throughout the curriculum.
•	Respond to new developments in technology.
•	Equip pupils with the confidence and capability to use computing throughout their lives.
•	Enhance learning in other areas of the curriculum using computing.
•	Develop the understanding of how to use computing safely and responsibly.

The national curriculum for computing aims to ensure that all pupils:
•	Understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication
•	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.

Early Years

It is important in the foundation stage to give children a broad, play-based experience of ICT in a range of contexts, including outdoor play. Computing is not just about computers. Early years learning environments should feature ICT scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to explore using non-computer based resources such as metal detectors, controllable traffic lights and walkie-talkie sets. Recording devices can support children to develop their communication skills. This is particularly useful with children who have English as an additional language.

By the end of key stage 1 pupils should be taught to:

• Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions
• Write and test simple programs
• Use logical reasoning to predict and computing the behaviour of simple programs
• Organise, store, manipulate and retrieve data in a range of digital formats
• Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

By the end of key stage 2 pupils should be taught to:

• Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
• Use sequence, selection, and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs
• Use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs
• 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
• Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely
• Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Resources and Access

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible system by investing in resources that will effectively deliver the strands of the national curriculum and support the use of computing across the school. Teachers should inform the technician of any faults as soon as they are noticed in a log book. Resources, if not classroom based, are located in the ICT suite or with the ICT Subject leader.

Planning

The school has a Computing Scheme of Work developed by our ICT Subject Leader to deliver the new Computing National Curriculum. Teachers will take account of children with additional needs and plan, where necessary, to support individuals or groups of pupils to enable them to participate effectively in the curriculum.

Assessment and Record Keeping

Teachers regularly assess capability through observations and looking at completed work. At the end of each unit teachers assess each child's progress and enter a W, M, A or GD onto an ICT assessment spreadsheet, to indicate whether pupils are working below, within, secure in or at greater depth than, the learning objectives.

Outcomes are used to plan future work and provide the basis for assessing the progress of the child. They are passed on to the next teacher at the end of the year. Computing work is saved on the school network.

Monitoring and Evaluation

The subject leader i monitors the standard of the children's work and the quality of teaching. The subject leader is also provides support to colleagues in the teaching of computing, g information about current developments in the subject, and provides a strategic lead and direction for the subject in the school.

Equal Opportunities

We will ensure that all children are provided with the same learning opportunities whatever their social class, gender, culture, race, disability or learning difficulties. All pupils have equal access to ICT and computing and all staff members follow the equal opportunities policy. Resources for SEN children and gifted & talented will be made available to support and challenge appropriately.

Health and Safety

The school is aware of the health and safety issues involved in children's use of ICT and computing.

• All portable electrical equipment in school is tested by an external contractor every twelve months. It is advised that staff should not bring their own electrical equipment in to school but if this is necessary, then the equipment must be PAT tested before being used in school.

• Damaged equipment should be reported to the technician who will arrange for repair or disposal.

• Children should not put plugs into sockets or switch the sockets on.

• Trailing leads should be made safe behind the equipment

• Liquids must not be taken near the computers

• E-safety forms an integral part of the curriculum and the school will deliver further education through assemblies termly and parent presentations biennially. All children sign a safe use contract and guidance is placed over each class PC

Security

• The technician /coordinator will be responsible for regularly updating anti-virus software.
• Use of ICT and computing will be in line with the school's 'acceptable use policy'. All staff, and children must sign a copy of the schools AUP.
• All pupils will be aware of the school rules for responsible use on login to the network and will understand the consequence of any misuse.
• The agreed rules for safe and responsible use of ICT and computing and the internet will be displayed in all ICT and computing areas.

Date: January 2017