Marsh Green Primary School

Computing Policy

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Introduction

The use of information and technology is an integral part of the national curriculum and is a key skill for everyday life. Computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Marsh Green Primary School we recognise that pupils are entitled to quality hardware and software and a structured progressive approach to the learning of the skills needed to enable them to use it effectively. The purpose of this policy is to state how the school intends to make this provision.

Aims

- Provide a relevant, challenging and enjoyable computing curriculum for all pupils.
- Meet the requirements of the national curriculum programmes of study for computing.
- Use computing as a tool to enhance learning throughout the curriculum.
- To respond to new developments in technology.
- To equip pupils with the confidence and capability to use the skills they have been taught within the computing curriculum.
- To enhance learning in other areas of the curriculum using computing.

- To develop an understanding of how to use computing safely and responsibly.

The national curriculum for computing aims to ensure that all pupils

- Can 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.

Rationale

The school believes that computing:

- Gives pupils immediate access to a rich source of materials.
- Teaches pupils to stay safe online by providing them with practical techniques to help to keep themselves safe.
- Can motivate and enthuse pupils to achieve their potential.
- Provides valuable skills which can be used throughout life.

- Has the flexibility to meet the individual needs of each pupil.
- Stimulates pupils to participate in areas of the curriculum where they would usually lack confidence.

<u>Objectives</u>

<u>Early Years</u>

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. ICT 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 in using a range of hardware with increasing control, including the use of a mouse and a mouse touch pad. They will also build control and language skills through a variety of software used on interactive whiteboards and programmable toys. Recording devices can also support children to develop their communication skills. This is particularly useful for children who have English as an Additional Language. Early Years provision should also allow children to develop an understanding of how technology is used throughout the local community.

Key Stage 1

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 can be completed by following a sequence of instructions.
- Write and test simple programs.
- Use logical reasoning to predict the behaviour of simple programs and be able to debug a program of their own.
- 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.

Key Stage 2

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 pc systems by investing in resources that will effectively deliver the strands of the national curriculum and support the use of ICT and computing across the school. Teachers are required to inform the ICT and computing leader of any faults as soon as they are noticed. Resources if not classroom based are located in the CCTV room and meeting room. A service level agreement with 'Mad4IT' is currently in place to help

support the coordinator to fulfill this role both in hardware & audio visual. ICT and computing network infrastructure and equipment has been sited so that:

• Every classroom from Young Explorers to y6 has a laptop connected to the school network and an interactive whiteboard with sound, DVD and video facilities. All classes also have a teacher IPad.

• There are 2 laptop trolleys in school containing 60 netbooks with internet access available to use in classrooms.

• There are also 13 laptops shared between year 5 and 6.
• There are also 30 IPads situated in the CCTV room.

• Each class from y1 – y6 has an allocated slot across the week for teaching of specific ICT and computing skills.

• Pupils may use ICT and computing independently, in pairs, alongside a TA or in a group with a teacher.

• The school has an ICT and computing technician who is in school every Thursday morning.

Planning

As the school develops its resources and expertise to deliver the ICT and computing curriculum, modules will be planned in line with the national curriculum and will allow for clear progression. Modules will be designed to enable pupils to achieve stated objectives. Pupil progress towards these objectives will be recorded by teachers as part of their class recording system. Staff will follow medium term plans

with objectives set out in the national curriculum and use the same format for their weekly planning sheet.

Inclusion

At Marsh Green we plan to provide for all pupils to achieve, including boys and girls, higher achieving pupils, gifted and talented pupils, those with SEN, pupils with disabilities, pupils from all social and cultural backgrounds, children who are in care and those subject to safeguarding, pupils from different ethnic groups and those from diverse linguistic backgrounds.

Health and safety

The school is aware of the health and safety issues involved in children's use of ICT and computing. All electrical appliances in school are tested accordingly. 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. This also applies to any equipment brought in to school by, for example, people running workshops, activities, etc. and it is the responsibility of the member of staff organising the workshop, etc. to advise those people. All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the ICT Co-ordinator or head teacher who will arrange for repair or disposal.

Security

 • The ICT and computing technician 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, volunteers and children must accept this.

• Parents will be made aware of the 'acceptable use policy'.

• All pupils and parents will be aware of the school rules for responsible use of ICT and computing and the internet 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.

Policy Date: June 2015