



# Computing Policy

<b>The status of the policy:</b>	Final
<b>Purpose:</b>	Outline the teaching of computing across the school
<b>Consultation:</b>	staff and governors
<b>Links with other policies:</b>	<ul style="list-style-type: none"><li>• Teaching &amp; Learning</li><li>• Assessment, Recording and Reporting Policy</li><li>• School vision</li><li>• Home Learning Policy</li><li>• Monitoring &amp; Evaluation Schedule</li><li>• Whole school vision statement</li></ul>
<b>Monitoring and evaluation:</b>	This is policy is monitored and evaluated by the Computing Leader
Date established by governing body:	12 <sup>th</sup> July 2021
Date for full implementation:	1 <sup>st</sup> September 2021
Date for review:	1 <sup>st</sup> September 2024

## Rationale

*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, and 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.*

National Curriculum 2014

## **Aims of Computing**

Birch Hill Primary School aims to ensure that all our 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 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

## **Present resource provision**

The school has 30 laptops situated in 2 trollies inside the security cupboard which can be moved to different areas of the school.

There are 2 computers in each of the Key Stage 1 & 2 and reception classrooms. Each machine has internet access and all the relevant applications needed to teach computing in school.

Purple Mash is used to teach all three aspects of computing – information technology, digital literacy and computer science. This has a clear progression of computing skills from reception to year 6.

## **Classroom Provision**

In addition to the above there is a variety of other ICT equipment in school including; Roamers, Beebots/Probots, tape recorders, CD player, radios, televisions and headphones. In addition to this, there is a variety of software is available for all machines.

To ensure that copyright laws are adhered to, staff, pupils and parents are not permitted to run software brought in from outside school on school machines. An

Internet safety policy has been developed in order to allow the safe and efficient use of the Internet for both staff and pupils in an educational context.

The new scheme of work was purchased in 2020 and will be embedded as we progress through the next couple of years. As staff confidence increases and relevant training disseminated, computing will need to be treated as a core subject in the curriculum.

In Computing, as with all subjects, in order to develop the continuity and progression of teaching and learning, a balance between whole class, individual and group work, and direct teaching, pupil investigation and skills practice should be planned throughout the school.

Staff confidence and expertise will be developed if requested through training sessions provided by the Computing Co-ordinator, and external agencies. Support will be given, where possible, with Computing planning and teaching by the Computing co-ordinator.

Computers will also be used to enhance learning on other subjects outside of the computing curriculum.

### **Entitlement to the Computing curriculum**

All children should have access to the use of computing technologies regardless of gender, race, cultural background or physical or sensory disability. Where use of a school computer proves difficult for a child because of a disability, the school will endeavour to provide specialist equipment and software to enable access. Children with learning difficulties can also be given greater access to the whole curriculum through the use of these technologies. Their motivation can be heightened and they are able to improve the accuracy and presentation of their work. This in turn can raise self-esteem.

Planning for Computing in the early years needs to be considered carefully if children are to begin to gain confidence in the use of a variety of technologies as soon as they start attending school. A range of appropriate hardware, software and activities needs to be offered. Purple Mash has lessons for reception children.

### **Assessment and record keeping**

- On-going formative assessment is an integral part of good practice. Its main purpose is to enable the teacher to match work to the abilities and needs of the children and ensure progression in learning.
- Computing skills capability should be monitored regularly in relation to the Computing curriculum as outlined in the 'The National Curriculum' for England. Teachers should assess module requirements with reference to children's knowledge, understanding and skills. Other opportunities for assessment will arise from cross-curricular work.
- Samples of work should be kept for groups of children stored in classrooms or on the school network within relevant class folders.
- For Reception it may not always be practical to keep samples of work, but observations and discussions could be recorded.

- Purple Mash has assessment work and ideas and children's work can be saved and accessed easily by staff.

### **Links to the school development plan**

- Discussing and deciding on the importance/viability of portable devices (such as tablets) needs to be furthered.
- An audit of resources is undertaken yearly to ensure that hardware and software are kept as up-to-date as possible and that obsolete or broken machines are scrapped or repaired.

### **Staff training**

Needs will be met by:

- Auditing staff skills and confidence in the use of information technologies regularly;
- Arranging training for individuals as required;
- The Computing Co-ordinator should attend courses and support and train staff as far as possible.
- Annual e-safety training must be arranged and completed by all staff working with children – remove as not done? Purple Mash has online safety lessons for the children in every year group – these progress.
- All staff must be trained on professional conduct and safer working practices regarding technologies such as Twitter, Facebook, Blogging etc.

### **Health and Safety**

Children should not be responsible for moving heavy equipment around the school. They may load software but should not be given the responsibility of plugging in and switching machines on without a member of staff present. Children will be expected to log on/off of computers without adult supervision during year 3.

### **Food and drink should not be consumed near computing equipment.**

- It is the responsibility of staff to ensure that classroom computing equipment is stored securely, cleaned regularly and that their class or themselves leave the equipment clean and tidy after use.
- Staff should ensure that the children are seated at the computers comfortably and be aware of the dangers of continuous use (e.g. eye/wrist strain etc).
- An adult should always supervise children when they are accessing information via the Internet. The service provider does filter information but staff are advised to take great care on the content accessed by children and ultimately responsible for information accessed by pupils.

### **Review and evaluation procedures**

The everyday use of communication technology is developing rapidly, with new technology being produced all the time. This policy therefore will be reviewed and revised regularly. The Computing Co-ordinator will liaise regularly with staff, both at staff meetings and informally, to monitor the effectiveness of the policy, schemes of work and the Computing curriculum. Meetings with subject co-ordinators will also ensure that the use of information technologies across the curriculum is planned for and evaluated.

## **Monitoring and Evaluation**

Monitoring is the responsibility of the head teacher, governor and the Computing Lead. Consistency is important in all aspects of school life. This policy sets out clear expectations that support children's learning. It should be followed as consistently as possible.

The purpose of monitoring teaching and learning is to evaluate strengths, identify areas for development and further improve the quality of what we do. Some of this might be through the Performance Management process and at other times it might be as part of our ongoing cycle of self-evaluation linked to the School Development Plan (SDP).

The quality of teaching and learning in Computing (as across the whole school) is monitored in a number of different ways. This may be through lesson observations, Learning Walks, scrutiny of planning and children's work/books and interviewing children.

We use Ofsted criteria as a benchmark to evaluate standards of teaching and learning.