



Computing Policy

Policy adopted – July 2019

To be reviewed – July 2022

The Acorn Federation Computing Policy

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

Intention of Computing

The Federation 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

Marston Montgomery Primary School currently has 9 laptops situated in a trolley which can be moved to different areas of the school. There are currently 4 i-Pads and 5 'Beebots' for pupils to use in school. Where relevant, they are linked to the school network.

In addition to this, there is a variety of software available for all machines.

At Long Lane (C of E) Primary School, there are 10 laptops, 19 i-pads and 4 'Beebot' robots.

Equipment is replaced on a rolling programme in both schools.

Each machine has internet access and all the relevant applications needed to teach computing in school.

The 100 Computing Lessons scheme of work is available to aid all staff in the delivery of the curriculum from September 2014. These will be supported by access to termly published plans eg Twinkl.

Implementation of Computing

Where possible, computing will be taught, as appropriate, within other curricular topics eg Scratch and research projects linked to history. A range of equipment and programmes will be used eg Roamers, Pixie, tape recorders, CD player, radios, televisions and headphones.

An Internet 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. 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.

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.

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.

Impact of Computing

In order to assess the impact of the Computing curriculum, Computing skills capability will be monitored regularly in relation to the Computing curriculum as outlined in the 'The National Curriculum' for England. Teachers will 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 will 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.

Links to the school development plan

- The Computing Co-ordinator produces an action plan.
- 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
- 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.

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 on a yearly basis. The Computing Co-ordinator will liaise regularly with staff, both at staff meetings and informally, to monitor the effectiveness of the policy 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.