Sherwood Primary School

ICT and Computing Policy

May 2018

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Computing Policy

Introduction

The use of information and communication 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 Sherwood Primary School, we recognise that pupils are entitled to quality hardware and software and a structured and 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.

Rationale

The School believes that ICT and Computing:

- give pupils immediate access to a rich source of materials;
- can present information in new ways which help pupils understand, access and use it more readily;
- can motivate and enthuse pupils;
- can help pupils focus and concentrate;
- offers potential for effective group working;
- should be embedded across all curriculum areas as well as being taught as a discrete subject;
- has the flexibility to meet the individual needs and abilities of each pupil.

Aims of the Teaching of Computing

The School's aims are to:

- provide a relevant, challenging and enjoyable curriculum for ICT and computing for all pupils;
- meet the requirements of the National Curriculum Programmes of Study for ICT and Computing;
- use ICT and 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 ICT and Computing throughout their later life;
- enhance learning in other areas of the curriculum using ICT and Computing;
- develop the understanding of how to use ICT and 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.

Resource provision

The School acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible PC 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 are required to inform the Computing Subject Leader of any faults as soon as they are noticed and note them on a document on the school network. A service level agreement is in place to help support the Subject Leader to fulfil this role both in hardware & audio/visual (DAKOL). ICT and computing network infrastructure and equipment has been sited so that:

- all classrooms contain an Interactive Whiteboard to enhance the teaching and learning in all lessons across the curriculum;
- at Sherwood Primary School, we provide access for the children to 40 laptops, stored in four portable charging units making them easy to move from class to class;
- there are 30 netbooks, housed in the Library, which can be used for KS1 and lower KS2;
- a bank of 6 iPad per year group and an iPad for each class teacher.
- several iPads in the Early Years Foundation Stage that are used to assess the pupils using *2simple* software.
- A class camera.

In addition to this, there is a variety of other ICT equipment in School to support the children in accessing the curriculum;

- A variety of software is available for supporting lessons across the curriculum.

- All software is recommended by the LA is used in School. Pupils also have access to resources online to cover all aspects of the curriculum. These resources are monitored and used under the guidance and supervision of the class teacher.

- To ensure that copyright laws and virus protection procedures are adhered to staff, pupils and parents are not permitted to run software brought in from outside School on School machines.

- The School has a Computing technician who visits school one morning every fortnight.

- A nominated governor takes a particular interest in ICT and Computing in School.

Teaching and Learning Objectives

Early Years Foundation Stage:

- It is important in the Early Years 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, control and language skills through opportunities to 'paint' on the whiteboard or drive a remote-controlled toy.
- Outdoor exploration is an important aspect, supported by ICT toys such as metal detectors, controllable traffic lights and walkie-talkie sets.
- Recording devices can support children to develop their communication skills. This is especially useful for 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 the behaviour of simple programs in computing;
- 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.

Entitlement to Computing Curriculum

An adult must supervise children when they are accessing information from the Internet. Our service provider does filter information but staff are responsible for the information accessed by pupils. When a teacher plans to use a website the content should be checked before a lesson.

Cross curricular links

As a staff we are all aware that ICT and computing capability should be achieved through Core and Foundation Subjects. Where appropriate, ICT and Computing should be incorporated into schemes of work for all subjects. ICT and Computing should be used to support learning in other subjects as well as develop ICT and Computing skills.

Assessment and record keeping

Teachers regularly assess capability through observations and looking at completed work. Key objectives to be assessed are taken from the National Curriculum to Assess Key ICT and Computing Skills each term. Assessing Computing is an integral part of teaching and learning and central to good practice. It should be process orientated - reviewing the way that techniques and skills are applied purposefully by pupils to demonstrate their understanding of the concepts of ICT and Computing.

We assess the children's work in Computing by making informal judgements as we observe the children during lessons. Computing work is saved on the school network. Other work may be printed and filed within the subject from which the task was set.

Monitoring and evaluation

The Subject Leader is responsible for monitoring the standard of the children's work and the quality of teaching. This may be through lesson observations, book scrutiny or looking at other data for the subject. The Subject Leader is also responsible for supporting colleagues in the teaching of computing, for being informed about current developments in the subject, and for providing a strategic lead and direction for the subject in the School. We

allocate special time for the vital task of reviewing samples of children's work and for visiting classes to observe teaching in the subject.

Staff training

- The Computing Subject Leader will assess and address staff training needs as part of the annual subject action plan or in response to individual needs and requests throughout the year.
- Individual teachers should attempt to continually develop their own skills and knowledge, identify their own needs and notify the Subject Leader.
- Teachers will be encouraged to use ICT and Computing to produce plans, reports, communications and teaching resources.

Pupils with special educational needs and Disabilities (see also SEND Policy)

We believe that all children have the right to access ICT and Computing. In order to ensure that children with SEND achieve to the best of their ability. It may be necessary to adapt the delivery of the Computing Curriculum for some pupils. We teach ICT and Computing to all children, whatever their ability.

Computing forms part of the National Curriculum to provide a broad and balanced education for all children.

Through the teaching of Computing we provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's different needs. Where appropriate Computing can be used to support SEND children on a one to one basis where children receive additional support.

Health and Safety

The school is aware of the health and safety issues involved in children's use of ICT and Computing. All fixed electrical appliances in School are tested by a LA contractor every five years and all portable electrical equipment in School is tested by an external contractor every twelve months.

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 Subject Leader or Headteacher 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.
- Magnets must be kept away from all equipment.
- Safety guidelines in relation to Interactive white boards will be displayed in all classrooms.
- Online Safety guidelines will be set out in the Safeguarding Policy.

Security
- The Computing technician and Subject Leader 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' see appendix. All staff, volunteers and children must sign a copy of the School's AUP.
- Parents will be made aware of the 'Acceptable Use Policy' on admission and again in KS2.

Parental involvement

Parents are encouraged to support the implementation of Computing where possible by encouraging use of ICT and computing skills at home during home-learning tasks and through the school website. They will be made aware of online Safety and encouraged to promote this at home. Parents will be informed annually either via a workshop or through other means such as the school newsletter or communications. Current information will be provided for parents on the Online Safety section on the school website.

Approval date: 09/05/2018

Review date: May 2021

Signed (Headteacher):

Signed (On behalf of the Governing Body):