

SHERWOOD PRIMARY SCHOOL

**POLICY
FOR
COMPUTING**

JULY 2015

POLICY FOR COMPUTING

Purpose of study

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.

At Sherwood Primary School we recognise:

- Computing is a core subject within the National Curriculum
- the use of Computing is a core skill
- children have an entitlement to good Computing skills training
- Computing facilitates learning across the curriculum
- Computing improves efficiency and quality
- the ability to communicate and share information electronically is an essential skill for all pupils
- Computing is used to support all areas of the curriculum, especially literacy and numeracy
- the internet and e-mail are tools which will enable pupils to develop links with the wider world
- Computing is not just about learning about computers, but learning through computers, using technology as a tool alongside other teaching methods

Aims

The national curriculum for computing aims to ensure that all 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 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.

Objectives

In order to achieve the above aims it is necessary for us to ensure:

- a continuity of experience throughout the school both within and among year groups
- the systematic progression through key stages 1 & 2
- that the National Curriculum programmes of study are followed
- and attainment target are given appropriate coverage
- that all children have access to a range of Computing resources
- that Computing experiences are focussed to enhance learning
- that cross curricular links are exploited where appropriate
- that children's experiences are monitored and evaluated
- that resources are used to their full extent
- that resources and equipment are kept up to date as much as possible
- that staff skills and knowledge are kept up to date

Subject content

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 precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Key stage 2

Pupils should be taught to:

- design, write and debug 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
- use logical reasoning to explain how some simple algorithms work 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
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Time Allocation

In a school year each child will have had access to hardware and software to allow them to:

- Develop Computing skills in each area
- Enhance other curriculum areas

Assessment

At Sherwood Primary School children are assessed in line with the national curriculum requirements for Computing as with all subjects. Individual assessments will take place in order to evaluate the child's strengths, weaknesses and targets for the future will be identified.

Computing is assessed in a variety of ways:

- Observation of child or group on task
- Discussion with children about their task
- Individual files of saved work on the school network
- Printouts of work
- Children's own evaluations of their work

These assessments:

- Inform future planning
- Provide information about individuals and groups
- Provide summative information
- Provide information for parents
- Contribute to each child's assessment portfolio and record of achievement

These assessments are carried out throughout both Key Stages and are the responsibility of the class teacher with support from the Assessment Coordinator.

(See Policy for Assessment, Recording and Reporting for further details.)

Record Keeping

Records are kept of each child's progress in Information and Communication Technology. Individual class teachers use methods appropriate to their class to record progress made, including assessment against the end of key stage expectations.

Management Information Systems (MIS)

Computing enables efficient and effective access to and storage of data for the school's management team, teachers and administrative staff.

The school complies with LEA requirements for the management of information in schools. We currently use SIMs which operates on the school's administrative network and is supported by the LEA Westfield Centre.

The school has defined roles & responsibilities to ensure data is well maintained, secure and that appropriate access is properly managed with appropriate training provided.

School liaison, transfer and transition

The school is connected to the Lancashire intranet which enables the transfer of information electronically. Email is now used frequently to liaise with the LEA, governing body, other schools and, government agencies.

Future developments regarding our school management information system will enable the transfer electronically of data to aid transfer and transition to or between or within schools.

Roles and responsibilities

Senior Management

The overall responsibility for the use of Computing rests with the senior management. The Head, in consultation with staff:

- determines the ways Computing should support, enrich and extend the curriculum;
- decides the provision and allocation of resources ;
- decides ways in which developments can be assessed, and records maintained ;
- ensures that Computing is used in a way to achieve the aims and objectives of the school;
- ensures that there is an Computing policy, and identifies an Computing co-ordinator.

ICT Coordinator

The coordinator for Computing is Mr. Nigel Green.

The Computing coordinator has overall responsibility for the management of Computing throughout the school for:

- raising standards in Computing as a national curriculum subject
- facilitating the use of Computing across the curriculum in collaboration with all subject coordinators
- providing or organising training to keep staff skills and knowledge up to date
- advising colleagues about effective teaching strategies, managing equipment and purchasing resources
- Managing the security of the network.
- monitoring the delivery of the Computing curriculum and reporting to the headteacher on the current status of the subject.

The Subject Coordinator

There is a clear distinction between teaching and learning in Computing and teaching and learning with Computing. Subject coordinators should identify where Computing should be used in their subject schemes of work. This might involve the use of short dedicated programs that support specific learning objectives or involve children using a specific application which they have been taught how to use as part of their Computing study and are applying those skills within the context of another curriculum subject. Subject coordinators work in partnership with the Computing coordinator to ensure all National Curriculum statutory requirements are being met with regard to the use of Computing within curriculum subjects.

The Classroom Teacher

Even though whole school co-ordination and support is essential to the development of Computing capability, it remains the responsibility of each teacher to plan and teach appropriate Computing activities and assist the co-ordinator in the monitoring and recording of pupil progress in Computing.

Resources and Accommodation

In order for all pupils to have equal access, at Sherwood Primary School, it is our aim for all classes to have access to high specification computers in each classroom, networked to enable accessibility to the core software on the server and the internet. Pupils have access to sets of laptops or netbooks that can be moved and to desktop machines in each room, all are linked to the server.

At Sherwood Primary School we currently have:

2/4 computers in each classroom linked to the network.

32 laptops stored in 4 trolleys.

32 netbooks stored in 4 trolleys

13 Interactive Whiteboards in classrooms.

Interactive Whiteboards in the hall and Y5/6 resource area.

To ensure security of the system within the school, all existing and new computers are recorded in the school equipment log book, with the make, date of purchase, reference codes and location recorded.

Other Information and Communication Technology equipment, computers, scanners, digital cameras, data-logging equipment are available in school.

Each member of staff has an up to date list of software in the Scheme of Work. All software is loaded on the network or filed in boxes in the Y5/6 resource area. Non-network software is accessible to all teaching and non-teaching staff.

Each teacher is responsible for the day-to-day care of his or her computer and for the software they use. Any problems must be reported to the coordinator. Moving desktop machines should only be done in liaison with the ICT Coordinator. Netbooks and laptops should be put back on charge at the end of each lesson.

All children's work is stored on the school network. Each child has a file, which they take through the school with them. The children's files are kept in class folders and it is up to the class teacher to supervise these files/folders and delete material that is no longer needed.

Health & Safety

At Sherwood Primary School we recognise the importance of health & safety issues and the potential risks for all in regard to the use of IT equipment. Sherwood Primary School follows the guidelines in the DfEE/Becta document " Superhighway Safety".

All teachers are responsible for making sure the hardware and software are used correctly and safely on a day-to-day basis. All problems should be reported to the Computing Coordinator and the maintenance log book completed.

At Sherwood Primary School we recognise the importance of good posture. The computers in the classrooms are placed on trolleys/low tables/computer or workstations at the correct and appropriate height and position for the children in the class.

The children will be shown the correct way to use a mouse, switch on and off the computers and load/unload a CD and pen-drive. They will also be shown how to adjust the brightness and position the monitor to avoid glare from lights or windows.

Short breaks during ICT lessons are encouraged, e.g. ask children to look away from the screen for a short time.

Internet Use

At Sherwood Primary School the children and staff use the Internet on a daily basis and it is our main concern that the pupils in Sherwood Primary School do not have access to any unsavoury or unsolicited material. The internet access is made through the Lancashire Council service provider. Linking through this network allows for a more secure system as it is protected by a firewall. We also have access to the NGFL /CLEO education material as we are linked to their intranet.

The pupils in school are only allowed to access the internet under the full supervision of a member of staff. Staff should check that 'key-word' searches on the Internet do not display unsuitable sites(discuss with pupils what 'key-words' can be used).The children are only allowed to send e-mails under close supervision. They must not be allowed to give personal details or digital images of themselves over the internet.

Virus protection

It is the responsibility of the ICT co-ordinator to check that all class and suite computers are kept virus free and the bursar the office computers. To prevent a virus entering the network the following procedures must be followed:

- staff are responsible for ensuring that only approved software is loaded onto school computers
- No pen-drives are to be used from outside sources without the approval of the Computing coordinator. All such discs/pen-drives must be checked before use.
- At Sherwood Primary School we acknowledge the time and effort staff put in at home to prepare lessons, plan, write policies, reports etc. However, extreme care must be taken when pen-drives are brought from home. Pen-drives MUST be checked before being used on the

school computers. Staff need to take reasonable precautions to ensure that their laptops/home computers are virus free e.g. installing anti-virus software.

- The children **must not** take pen-drives home to load work from another computer or do their homework or bring pen-drives in from home (unless virus checked by a member of staff).
- Material must not be downloaded from the Internet unless it is virus checked. It must be downloaded to a pen drive and must **NOT** be downloaded onto a hard/network drive.

Hacking

Users must not attempt to gain access to drives, data or files other than those they are authorised to use, nor interfere in any way with someone else's data or files.

Copyright and Data Protection

All users must respect the laws of copyright, software and otherwise. Sherwood Primary School is registered under the Data Protection Act, therefore, any personal data held on the network for either curriculum or administration purposes must not be misused.

It is very important that we have licences for all software used in school. At Sherwood Primary School we will only use software on the network covered by licences. No personal software is to be used on the school network.

Network Rules

Users of the network must agree to abide by the Code of Practice

- treat all equipment with care and attention
- close programs down in the correct manner
- put the chairs, headphones and CDs away in the correct place
- ensure all discs/pen drives are virus checked if brought from elsewhere
- log out of the network when leaving the workstation
- report damage or faults to the ICT co-ordinator

Professional Development Provision

The school is committed to providing an in depth training programme for teaching and non teaching staff to ensure they are fully competent and confident in using Information and Communication Technology. Through regular INSET it is our aim to make sure all staff can use the equipment correctly, teach ICT skills to the pupils, use the computers to access information on the Internet and support learning in all subjects e.g. by using Interactive Whiteboards in lessons.

The training needs are identified through:

- School improvement planning.
- Curriculum review and evaluation.
- Coordinator needs.
- Individual needs.
- The arrival of new equipment e.g. Interactive Whiteboards.

These are prioritised by the Staff Development/INSET Coordinator and form part of the School Improvement Plan.

Equal Opportunities

All teaching and non-teaching staff at Sherwood Primary School are responsible for ensuring that all children, irrespective of gender, ability, ethnicity and social circumstances, have access to the whole curriculum and make the greatest possible progress.

Computing is an area of the curriculum where, because of its unique nature in requiring specific equipment, equal access needs to be planned and monitored very carefully. It is the responsibility of the individual teacher to plan their pairs and groupings so that this is achieved, and to keep records of this. General monitoring is the responsibility of the Headteacher and the Deputy Headteacher.

Inclusion

All children should have access to a broad, balanced curriculum, which includes Computing, and should make the greatest progress possible. Provision for children with SEN and gifted and/or talented children and/or children with English as in relation to Computing is the responsibility of the class teacher, support staff and SEN Coordinator as appropriate. Computing especially provides a means where children with SEN are able to present and develop their work easily.

Where possible, the computer is made available for specific children, or groups of children to work with support staff and/or work with each other so that work can be drafted and redrafted easily.

Evaluation

Evaluations are carried out by the class teacher. This is monitored by the Headteacher or Deputy Headteacher.

These evaluations focus on:

- Children's progress and achievements
- Appropriate use of hardware and software
- Coverage of the four strands

These evaluations form the basis for future planning, long and short term.

Evaluation and review of the Information and Communication Technology Policy and Scheme of Work take place on an annual basis.

Learning Out of School Hours

Pupils can access material via the school website and leave messages on the school blog. Manga High is also used to set Numeracy tasks for pupils.

Approval date: July 2015

Review date: July 2018

Signed (Headteacher):

Signed (On behalf of the Governing Body):

Further Information

Important documents, resources and contacts

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| TTA/NOF | ICT training for teachers and school librarians | 2000 |
| DfEE/BECTA | Superhighway Safety | |
| DfEE | Information and Communication Technology Scheme of Work | 2014 |
| DfEE | The National Curriculum Handbook for primary teachers in England | 2014 |
| websites | www.dfee.gov.uk/a-z/ICT and national curriculum www.becta.org.uk www.ngfl.gov.uk www.lancsngfl.ac.uk/curriculum/ict | |

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