Bilton Church of England Junior School

Policy for: Computing and ICT

Reviewed by: Miss Lewis 2019

Date of formation: September 2015

Ratified by the Governing Body on: October 2016

Table of review and modifications

Date reviewed	Reviewed by	Page number of changes	Summary of changes made

Introduction:

The use of Computing is an integral part of the National Curriculum and is a key skill for everyday life. Computers, IPads, programmable robots, digital and video cameras are but a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Bilton C of E Junior 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 become Computing proficient.

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 Computing throughout their later life.

• To enhance learning in other areas of the curriculum using computational skills.

• 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 digital devices and the Internet.

Rationale:

The school believes that Computing:
• Gives 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.
• Has the flexibility to meet the individual needs and abilities of each pupil.

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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.

Computing at Bilton C of E Junior School:

Bilton C of E Junior School believes that Computing is an integral part of the Teaching and Learning across the entire curriculum. We are a well-resourced school with laptops, Kindle Fire, recording devices, programmable toys, IPads (teacher) and interactive whiteboards available to support the delivery of high quality Computing lessons. The laptops have the software required to deliver the computing curriculum through the planned Programmes of Study. All computers are networked and linked to the Internet. The school has an 'Acceptable Use Policy, users within Bilton C of E Junior School have to accept the terms and conditions when logging on to a system.

Entitlement:

The pupil's entitlement to Computing is based upon the Programmes of Study for Computing as defined in the 2016 National Curriculum. The schemes of work used to deliver these programmes of study are:

- Online Safety – which is a mix of the computer scheme Rising Stars and lessons planned by teachers, supported with LGfL Resources, SWGL, Twinkl, CEOPS, Childnet International.

- Computer Programming – Rising Stars, additional resources Twinkl

- Presentational skills – Rising Stars, Microsoft Office Suite, Sans Serif

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From Years 3-6 children will study the following:

- Online Safety
- Computer Science
    - Be able to understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation. (CS)
    - Be able to analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems. (CS)
- Information Technology
    - Be able to evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Digital Literacy
    - Be responsible, competent, confident and creative users of information and communication technology. (DL)
- -Computer Programming
- -Presentation skills

Implementation:

Pupils will have the opportunity to develop their Computing capability in the core and foundation subjects. For details of specific applications, see the 2016 National Curriculum for all other curriculum areas. Opportunities provided by the class teacher will enable the children to work both individually and in small groups. For all Computing lessons the teacher will ensure that interactive strategies are used; teacher modelling is used; introductions are included and plenary sessions are incorporated to meet the learning objectives.

In this school, pupils will have experience with networked PCs, printers, Bee-Bots, data logging equipment, sensing equipment, calculators, digital media, Interactive Whiteboards, Ctouch, Kindle Fires and laptops. They will also have experience with the Internet and a variety of software that allows teachers to provide for progression of skills, concepts and applications.

As an inclusive school, Computing is made accessible to children with Special Educational Needs, by providing them with suitable software and tasks and with extra support in the use of software packages, CIP Clicker and peripherals available.

In Computing lessons, pupils with specific learning needs also have access to, where appropriate:
- Visual prompts to engage and increase attention.
- Real objects to explore and manipulate.
- Symbols for key vocabulary.
- Opportunities for repetition, to consolidate and reassure.
- Opportunities to use special interests where appropriate.
- Support where necessary to develop new skills

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Assessment:

Pupils are teacher assessed at the beginning, throughout and at the end of a computing module, but also using computing across other topics. Records are kept in the form of teacher evaluations, saved work on the network and a class Computing Profile which is maintained by the class Online Ranger representative, who journals the learning weekly. Home learning projects also provide opportunities to gather evidence on pupils work and teachers use as evaluation material.

For assessment a Low, Middle and Greater ability criteria are identified and children are assessed against these criteria throughout the academic year. Teacher assessments, including whether a child is working at Greater Depth, Meeting Expectation or Working Towards the end of year objectives achieved, are reported to parents in their child's annual report, and assessments are passed on to the next class teacher. Pupils are actively encouraged to use online educational programmes: for example Mathletics to support their Maths skills and Linguascope for languages.

Management:

The Computing Curriculum Lead and Computing Technician, Senior Management and DSL's are responsible for the implementation of this Policy. The management and repairs of Computing resources, monitoring Computing standards of achievement and arranging appropriate Inset for all members of staff where necessary is the responsibility of the Computing Curriculum Lead. Bilton Junior School, with is partner Launch Systems, is committed to continuing the reliability of the network. Jo Thomas is currently employed as Computing Technician by the school to support with technical matters.

The Class Teachers are responsible for the delivery of this policy and the care and security of the hardware and software. The school is committed to the ongoing resourcing of Computing equipment and software, in relation to the School Development Plan. The school is responsible for ensuring that copyright regulations are not infringed and that we are working in line with GDPR (General Data Protection Regulation).

Review
The policy will be reviewed annually with the aim of meeting any new developments and initiatives both nationally and locally.

Background Information:
This policy was drafted by the Curriculum Leader for Computing; implemented SLT and DSL; presented to the whole staff for discussion; redrafted and agreed. It is reviewed on a regular basis.