



**Federation of  
St Godric's and St Mary's  
RCVA Primary Schools**

# Computing Policy

June 2015

# School Policy

The policy is written with consideration to our school commitment to the rights of the child and our achievement of becoming a rights respecting school. Although direct reference to this is not continuously made, the policy has been written with full awareness of our commitment to Children's rights.

## Purpose

A high quality computing education equips pupils to understand and change the world through logical thinking and creativity, including by making links with mathematics, science and technology. The core of computing is computer science, in which pupils are taught the principles of information and computation, and how digital systems work. Computing equips pupils to use COMPUTING to create programs, systems and a range of media. It also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, COMPUTING at a level suitable for the future workplace and as active participants in a digital world.

This document is intended for

- All teaching staff
- All staff with classroom responsibilities
- School governors
- Parents
- Inspection teams

Copies of this policy are kept centrally and are available from the Head Teacher and the subject coordinator and are also available on our school website.

## 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 COMPUTING

## **Attainment targets**

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

### **Subject content in EYFS**

In EYFS the children will be working towards the Early Learning Goals which are

- The children will recognise that a range of technology is used in places such as home and schools.
- The children can select and use technology for a particular purpose.

### **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
- Use technology safely and respectfully, keeping personal information private; know where to go for help and support when they have concerns about material on the internet
- Recognise common uses of COMPUTING beyond school.

### **Subject content 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

### **Cross Curricular Links**

COMPUTING permeates all subjects, themes and dimensions in accordance with the orders for COMPUTING.

### **Classroom Management of COMPUTING**

All classrooms are equipped with an Interactive Whiteboard, which is run from a PC/laptop computer. The hall has a projector and a screen. School has 20 laptop computers connected to a CC4 server via wireless network connection.

The school also has 16 ipad tablets connected to the internet via a wireless network. All classes have access to the ipads and are utilised throughout a range of curriculum subjects. Additionally, Foundation Stage are equipped with 2 mini ipad tablets used for digitally storing and cataloguing observations of children. Additional Computing hardware is available to every class (e.g. microphones, data logger, floor robots and digital cameras)

Computing skills and knowledge should be presented:

- Via demonstration by the teacher to stimulate and teach children specific Computing skills and packages.
- With lots of 'hands on' experience allowing regular opportunities for practise and consolidation of Computing skills and techniques.
- Via both independent and collaborative activities to use COMPUTING as a tool for investigation in all subject areas.

### **Timing**

The recommendation is for one hour per week in KS1 and 2 to be dedicated to discrete Computing lessons to introduce new skills. All children have access to laptop computers and I pads at other times throughout the week, in order that Computing skills are used and embedded in other curriculum areas.

### **Continuity and progression of Computing**

The Computing curriculum should ensure continuity and progression throughout the Foundation Stage and Key Stage 1 and Key Stage 2. Progression in Computing involves:

- The progressive development of pupils' skills, knowledge and understanding
- Breadth of applications.
- Increased complexity of contexts in which COMPUTING is applied.
- The growing autonomy of the pupil in their learning.

In Reception, children are taught new skills which are explained and demonstrated and practised. Opportunities exist at all times for children to practise their Computing skills within the classroom and outdoor areas.

Likewise throughout Key Stage 1 and 2, children are taught through discrete Computing lessons with opportunities to use COMPUTING arising through all of the curriculum.

### **Assessment & Recording of Computing**

Teacher assessments of Computing capability will be recorded throughout the year. Staff should keep examples of pupils' work and complete assessment records to form a judgement on each pupil's level of attainment at the end of both Key Stages. All children have a digital working folder for each academic year of school. A record sheet is kept for each year group for which the class teacher will highlight to show which areas the children have successfully covered. Some class or group activities may be recorded using digital photography, digital recording and printouts.

### **Special Educational Needs**

Pupils with Special Educational Needs benefit from using COMPUTING as it can enhance and for some pupils, enable access to the curriculum, which in turn encourages motivation and development of cross-curricular skills and so raises achievement. Opportunities to utilise COMPUTING with children with SEN are thus maximised.

## **Equal Opportunities**

The National Curriculum states that, "All pupils, regardless of race, class or gender, should have the opportunity to develop Computing capability."

We ensure that all pupils:

- Have equal access to Computing resources.
- Have equal opportunities to develop Computing capability.

- Use software that is appropriate to their ability.

## **Staff Development**

Staff will be encouraged to:

- develop and update their skills, knowledge and understanding of Computing
- identify their Computing INSET needs and take advantage of training opportunities both school and centre based.

## **Monitoring**

Monitoring COMPUTING will enable the Computing co-ordinator to gain an overview of Computing teaching and learning throughout the school. This will assist the school in the self evaluation process indentifying areas of strength as well as those for development.

In monitoring of the quality of Computing teaching and learning the Computing co-ordinator will:

- Scrutinise plans to ensure full coverage of the Computing curriculum requirements
- Analyse children's work
- Observe Computing teaching and learning in the classroom
- Hold discussions with teachers
- Analyse assessment data

## **Health and Safety (Specific guidance on do's and don'ts)**

- monitors are safely positioned
- appropriate lighting
- no amateur repairs
- appropriate positions of workstations
- workstations to be kept clean and tidy
- service and maintenance contract
- annual PAT testing of all electrical equipment
- wires must not be allowed to trail on the floor or worktops
- chairs and tables are at an appropriate height for the children
- children and staff do not eat or drink near the computers
- children are aware of the dangers of using electrical equipment and are taught the rules for safe use of the computers, such as how to switch them on and off correctly
- children do not work at the computer for long periods of time without a break

We will operate all COMPUTING equipment in compliance with Health and Safety requirements. Children will also be made aware of the correct way to sit when using the computer and the need to take regular breaks if they are to spend any length of time on computers. Specific rules for the use of Internet and E-mail are on display in all COMPUTING areas for reference. The school also has a 'Responsible Use of the Internet Policy' document. The virus checker is updated regularly.

## **Appropriate legislation, including copyright and data protection**

All software loaded on school computer systems must have been agreed with the designated person in the school. All our software is used in strict accordance with the license agreement. The COMPUTING co-ordinator holds an up to date list of all the software licenses and on which computers the software is installed. All staff are informed of the licensing laws for software and the risks from virus infection. We don't allow personal software to be loaded onto school computers. Please refer to the school's Data Protection Policy.

## **Effective and efficient deployment of COMPUTING resources**

COMPUTING resources are deployed throughout the school to maximise access, to enhance teaching and learning and to raise attainment. All computers are equipped with a set of core software to meet the requirements of the scheme of work and additional software is available to meet specific requirements of other subjects and for special educational needs. Software not installed on machines is available from the COMPUTING co-ordinator or ITSS. Up to date virus protection is installed on all machines. There is also a teacher's laptop attached to each IWB and digital projector for the use of COMPUTING as well as presenting teaching materials for whole class presentations and interactive teaching activities.

The school's digital projectors are located in each of the classrooms. They are permanently mounted. A consistent interface is provided on all machines to enable familiarity and continuity with generic 'toolkit' software licensed and available on all curriculum computers in school. Each user has their own unique 'user name' which allows them to access the available software from any networked laptop/PC. Subject specific titles are kept in the COMPUTING box in the resources cupboard; the digital cameras are locked away each night in the Secretary's office and can be borrowed when needed. All manuals/information booklets and software for laptops / PC's are kept in the COMPUTING stock cupboard in the corridor/coordinator's classroom. A curriculum 'peer to peer' network enables internet access on all machines as well as the ability to print to the schools only colour laser printer and black laser printer which is located in the resource room as well as storage and access to shared files.

This policy was written by the Computing Coordinators following discussions with the teaching and support staff.

## **Review and Evaluation**

This policy will be reviewed in June 2018