

**THAKEHAM PRIMARY SCHOOL**

'Small School, Big Opportunities, Great Achievements'



# Computing Policy

## Thakeham Primary School

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01.09.17

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Signed

Headteacher: *S. Norton*

Chair of Governors: *A. Rini*

## 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

## Aims of Computing

We aim 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

## The Curriculum

Foundation Stage Computing falls within 'Knowledge and Understanding of the world' within the Statutory Framework for the Early Years Foundation Stage. The requirement is that:

“children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.”

We build on and develop the children’s previous experiences of computing that they may have experienced either at home, nursery or school.

Our EYFS classroom has 3 computers which are available to the children all day within their classroom. Pupils also have access to a class set of laptops and a set of tablets stored centrally..

## Key Stages 1 and 2

The National Curriculum states that children should be taught to:

		Statement
Key Stage 1	Computer Science	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
	Information Technology	use technology purposefully to create, organise, store, manipulate and retrieve digital content
		recognise common uses of information technology beyond school
	Digital Literacy	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.		

		Statement
Key Stage 2	Computer Science	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
	Information Technology	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
	Digital Literacy	use technology safely, respectfully and responsibly
		recognise acceptable/unacceptable behaviour
		identify a range of ways to report concerns about content and contact.

We use the Rising Stars Computing Scheme of Work to support our long and medium term plans. The units in each year of this scheme fulfil the objectives set out in the National Curriculum. Therefore, at Thakeham Primary School, Computing is initially taught as a discreet subject and then through cross curricular topics where appropriate.

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.

### Present Resource Provision

Each class benefits from a teacher laptop and Clevertouch screen. A Clevertouch screen and laptop are also available in the Food Technology Room. The school hall (to be opened in December 2017, will have a laptop, screen and audio visual resources. The temporary hall has available a laptop, projector and interactive whiteboard.

Each classroom has 3 student devices. The school has a class set of laptops stored centrally across 2 trolleys. The school has 12 tablets also situated in a separate trolley.. 2 further tablets are available for sole use by EYFS staff in conjunction with the program 2Simple.

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

In addition to the above there is a variety of other ICT equipment and software available for all machines.

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.

### E-Safety

We have an E-Safety and Acceptable Use policies for staff and pupils to allow the safe and efficient use of the Internet for both staff and pupils in an educational context.

All devices are monitored for inappropriate use via 'E-Safe' and a weekly report sent to the Headteacher.

### **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.

Pupils apply for the post of Digital Leader and ably support the Computing Curriculum Leader in all areas of technical support.

### **Assessment and record keeping**

- On-going formative assessment is an integral part of good practice. Its main purpose is to enable the teacher to match work to the abilities and needs of the children and ensure progression in learning.
- Computing skills capability should be monitored regularly in relation to the Computing curriculum as outlined in the 'The National Curriculum' for England. Teachers should 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 should be kept stored in classrooms or on the school network within relevant class folders.
- For EYFS it may not always be practical to keep samples of work, but observations and discussions could be recorded in their Learning Journals.

### **Role of the Curriculum Leader**

The Computing Leader is responsible for the following:

- producing an action plan to form part of the School Strategic Development Plan and managing their curriculum area budget as part of this
- Formulation of Long term Computing Plans and Progression of Skills to ensure progression and continuity across the year groups
- Undertaking an annual audit of resources to ensure that hardware and software are kept as up-to-date as possible and that obsolete or broken machines are scrapped or repaired.
- Training to support all staff as needed.
- Keeping up to date with changes and trends in technology
- Monitoring the Computing Curriculum in connection with the Headteacher

### **Staff training**

Needs will be met by:

- Auditing staff skills and confidence in the use of information technologies regularly;
- Arranging training for individuals or EYFS/Key Stage ½ as required;
- The Computing Leader 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. Please see Health & Safety policy.

### **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 Curriculum Leaders will also ensure that the use of information technologies across the curriculum is planned for and evaluated.

### **Links**

- E-Safety Policy
- Acceptable Use Policy (Staff & Pupil)
- Data Protection Policy
- School Technical Security Policy