



## COMPUTING AND ICT POLICY 2016

### **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.

### **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.

### **Organisation/implementation**

In order to achieve these aims and objectives, the teaching of Computing is organised into 3 areas:

- Computer Science
- Information Technology
- Digital Literacy (including e-safeguarding)

Each year group will teach all of these areas of study either:

- In a cross-curricular way to support and enhance topic areas;
- In specific units to develop the progression of Computing skills.

Within Sitwell Junior School learning activities for Information Technology are sequenced to ensure continuity and progression, and are taught in a variety of ways:

- Direct class teaching to introduce a specific program or skill;
- Through practical tasks using the appropriate hardware and software;
- Group activities, so that children can interact with each other;
- By providing children with real experiences in the practical application of Computing skills;
- By using Computing where possible for a specific purpose perceived by the child.

Computing planning and evaluation is done in year groups on a Cornerstones Curriculum planning map and is linked to year group topics. Work on specific Computing applications and/or skills is planned at year group level on a half-termly basis using the Cornerstones Curriculum short term planning format. Weekly planning is completed on a weekly timetable and refers to the short term planning sheet. This is differentiated using Blooms Taxonomy or skills based.

The Computing Coordinator ensures that computing work is planned to meet the needs of individual and groups of children. Attendance at Computing courses is open to all members of staff.

All classrooms are equipped with Smart Boards or plasma screens and projectors which are used daily to deliver the curriculum. This year, each classroom will be equipped with laptops, which the children will have access to. These can be borrowed and shared across year groups, but are expected to be returned to the relevant classrooms afterwards. Equal access is provided for all children and care is taken that no one child dominates when groups work at the computer.

### **Role of the Co-ordinator**

The Computing Coordinator is responsible for reviewing and updating the School's policies relating to Computing, monitoring standards of achievement and progression and the direction and supervision of the work of the ICT Technician, much of which will involve maintenance of the school network, the management of the school's hardware and software and the coordination of repairs. The Computing Coordinator will also offer advice on and demonstrate new peripherals as well as appropriate software when requested or appropriate, liaise with other curriculum coordinators to ensure effective use of computing in their areas and keep abreast of new software. The computing coordinator will liaise with Rawmarsh and Winterhill CLC and arrange and/ or lead staff training.

### **Assessment/ Recording**

#### **Formative Assessment**

Formative assessment takes place within every lesson and is used to inform the teacher so that they can adapt the lesson as appropriate, and plan future learning. The following formative assessment techniques are used:

- Self-assessment – children assess their progress against the lesson objective (Today we will be better at...) and the differentiated 'Can I...' statements on planning, which are shared with the children;
- Peer-assessment – children assess their partner's work against the above verbally and in writing;
- Open questioning – Quality teacher questioning is used to assess progress within the lesson
- KWL (what pupils already *know*, what they *want* to learn and what they have *learned*)

### **Summative assessment**

The attainment targets in all national curriculum subjects state:

*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*

### **Assertive Mentoring and EMAG**

After each ICT session, children will be assessed against the objectives from the National Curriculum. This will be recorded on EMAG in the same way as Assertive Mentoring. A dot (.) will indicate the objective has been taught, but the child has little or no understanding of it. A slash (/) will indicate the objective has been taught and the child has shown some understanding with support. A cross (X) will indicate that the child understands the objective and use it independently. From the data inputted, EMAG will calculate the number of dots, slashes and crosses and this will form an overall judgement whether the child is Stage 1/2/3/4/5/6 Emerging, Stage 1/2/3/4/5/6 Developing, Stage 1/2/3/4/5/6 Secure or Next Stage Reading. This information will be shared with children and parents.

### **Resources**

A variety of Information & Communication Technology resources are available in school.

- All classrooms have an interactive smartboard and projector.
- All classrooms will have laptops with airport Internet/Network access, is stored on the upper school corridor, for use by the upper school classes.
- IPADS + cases x 15
- A projector and screen in the school hall for use in assemblies.
- In the staff room (for use of staff) there is a laptop
- 1 x iPod Classic 80GB Silver is kept in the Computing coordinators classroom.
- 1 x iPod Classic 80GB Silver is kept in the Head Teacher's office.

- In the PPA room is: 5 x aGent vs Webcams, 5 x desktop tripods, 5 x Chroma Key Green Screens, Animators Animation Studio (5 User Software), 2 x Asus Eee PC 901 Netbooks, 9 x Flip Video Ultra HD Cameras, 2 x Canon Powershot A3100 Cameras + 2 Battery charger units, 1 x Olympus VN5500 Voice Recorder, 5 x Easi-speak Voice Recorders, 1 x Logitech Microphone, 1 x pair GP 3P Speakers, 2 x Gorilla Pod Camera Stands, Crazy Talk 6 – 5 user software, Comic Life Deluxe – 25 User Software + download instructions.
- An annual subscription to VOOT/Impelling Solutions ICT Consultancy provides technical help for hardware/network breakdown, when the manufacturers' warranties expire.

The School Curriculum Network Server, Router & Hub are located upstairs near the storerooms. Broadband Internet access is via the local authority RGFL portal.

(See Policy on Internet Access)

CD Roms kept by specific subject coordinators.

Each teacher is responsible for the day-to-day care of their computers and for the peripherals they use. Any problems must be reported to the Computing Coordinator. Machines are not to be moved about, disconnected or exchanged.

Class teachers should ensure that they have appropriate procedures with their children when using the laptop machines - including shut-down procedures and careful storage for re-charging.

The coordinator, in consultation with teachers and subject coordinators, will review annually the allocation of new hardware and software. This will reflect the degree of priority which is given to Computing each year in the School Improvement Plan and the Computing in Schools devolved budget .

The Computing Coordinator will offer advice and INSET on new equipment and technologies and support their introduction into classrooms use.

### **Staff Hardware**

All teachers and HLTAs are allocated a school laptop for work use at home and at school. Other key members of staff may also be allocated a school laptop (see staff laptop information document). These computers will be maintained by the school but staff should take reasonable care in their handling. School laptops used at home should not be used for any activity in contravention of the school's acceptable internet use policy, such as illegal file sharing.

The school will pay for and install anti-virus software but any Internet connections for use at home are the responsibility of the staff member. Staff should carry out any updates when requested by the school or hand the laptop into the school for updating when requested.

Staff are encouraged to take their assigned portable computers home in order to prepare resources and develop personal competence and confidence in the use of ICT. The school's insurance policy will not cover any equipment while it is at the teacher's home or in the teacher's car, even if in use on school business.

Each member of SLT is allocated an IPAD.

Every other classroom will be issued with an IPAD mini in January 2017 for use as a teaching tool within the classroom.

### **Monitoring/Review.**

Computing will be monitored by the Computing Co-ordinator as part of the school programme for monitoring and evaluating the whole curriculum, using agreed criteria. Any training requirements highlighted by a monitoring exercise will be addressed by the Computing Co-ordinator.

A portfolio of children's work will be built up throughout the year and kept in the staff file on the school intranet. Teachers will be asked to add a selection of Computing work to the file at the end of each unit to provide evidence of achievement and progress across the age range.

