

Policy for Computing

Helmingham Community Primary School

Written by: Charlotte Salmon

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Approved by:

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Computing Policy

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

Helmingham Community Primary School aims 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.

Present Resource Provision

- The school has 18 laptops situated in a trolley which can be moved to different areas of the school.
- There are 6 computers in the school – 1 in Sun Class, 1 in Moon Class and 4 in the Library.
- Each laptop and computer have internet access and all the relevant applications needed to teach computing in school.
- We currently have 18 iPads with relevant up to date apps for teaching the provision of the computing curriculum.

Teaching & Learning

In addition to the above there is a variety of other computing equipment in school including; Bee-Bots and mats, Pro-Bots (floor robots), Sphero Ollie (app controlled robot), digital microscopes, Tuff-Cam2 (digital camera & movie cameras), walkie talkies, log-box data loggers, CD players, Smart Whiteboards in all three classes, including 2 AirServer Licenses, listening sets and headphones.

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. An E-Safety policy has been developed in order to allow the safe and efficient use of the Internet for both staff and pupils in an educational context.

Long term plans/ideas have been established from September 2015. Staff have a list of the software that we have in school and what is suitable to use under the key headings of the computing curriculum. We have also used the assistance and support of Barefoot- a BT initiative to help us implement the computer science element of the curriculum. See plans/ideas in Appendix A and the software list in Appendix B.

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.

Staff confidence and expertise will be developed through training sessions provided by the Computing Leader, and external agencies. Support will be given, where possible, with computing planning and teaching by the Computing Leader.

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.

Assessment & 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. See Appendix C on Helmingham's assessment system.
- 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 for groups of children stored in classrooms or on the school network within relevant class folders.
- For Reception it may not always be practical to keep samples of work, but observations and discussions could be recorded.

Links to the School Development Plan

- The Computing Leader produces an action plan every school academic year.
- An audit of resources is undertaken yearly to ensure that hardware and software are kept as up-to-date as possible and that obsolete or broken machines are scrapped or repaired. Working closely with our IT Technician.

Staff Training

Needs will be met by:-

- Auditing staff skills and confidence in the use of information technologies regularly;
- Arranging training for individuals as required;
- The Computing Leader should attend courses and support and train staff as far as possible;
- All staff must be trained on professional conduct and safer working practices regarding technologies such as Twitter, Facebook, Blogging etc. Staff are asked to read and sign a summary of the Acceptance Use of Computing & Handheld Devices policy.

Health & Safety

Please also refer to the schools E-Safety Policy. Children should not be responsible for moving heavy equipment around the school. They should not be given the responsibility of plugging in and switching machines on without a member of staff present.

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 & 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 Leader will liaise regularly with staff, both at staff meetings and informally, to monitor the effectiveness of the policy and the computing curriculum. Meetings with subject Leaders will also ensure that the use of information technologies across the curriculum is planned for and evaluated.