



Pensilva Primary School Computing Policy

1. Introduction

1.1 The 2014 National Curriculum introduced a new subject, computing, which replaces ICT. This represents continuity and change, challenge and opportunity. It gives schools the chance to review and enhance current approaches in order to provide an even more exciting and rigorous curriculum that addresses the challenges and opportunities offered by the technologically rich world in which we live.

1.2 Computing is concerned with how computers and computer systems work, and how they are designed and programmed. Pupils studying computing will gain an understanding of computational systems of all kinds, whether or not they include computers. Computational thinking provides insights into many areas of the curriculum, and influences work at the cutting edge of a wide range of disciplines.

1.3 The Acceptable Use of ICT Policy and procedures, as well as the E-Safety Policy should also be read in conjunction with this policy.

2. The Nature of Computing

2.1 The 2014 National Curriculum presents the subject as one lens through which pupils can understand the world. There is a focus on computational thinking and creativity, as well as opportunities for creative work in programming and digital media. The introduction makes clear the three aspects of the computing curriculum: **computer science** (CS), **information technology** (IT) and **digital literacy** (DL).

2.2 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. To build 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.

	Key Stage 1	Key Stage 2
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	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 Appreciate how [search] results are selected and ranked.
Information Technology	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Use search technologies effectively 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	Recognise common uses of information technology beyond school 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	Understand the opportunities [networks] offer for communication and collaboration Be discerning in evaluating digital content Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
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3.1 Entitlement

The new National Curriculum states that pupils should be taught to:

3.2 In the Foundation Stage, the Information Communication Technology requirements stated in the Knowledge and Understanding of the World element of the Early Learning Goals Foundation Curriculum, are covered in continuous and blocked units.

4. Implementation

4.1 At Pensilva Primary School, computing will be taught both as a discrete subject, and in a cross-curricular way when the opportunity presents itself.

4.2 The laptop trolley is timetabled across the school and there are allocated laptops within each classroom which will be used to help pupils access the Computing curriculum, along with a range of other resources such as programmable toys.

4.3 The use of iPads and appropriate apps will help to support all areas of the curriculum including that of the computing curriculum.

4.4 The Computing subject leader and the headteacher will continually monitor the resources required to deliver the Computing element of the new National Curriculum.

5. Health and Safety

5.1 To avoid continuous focus on the screen, teachers should model at regular intervals.

5.2 Staff and pupils should avoid standing directly in front of any whiteboard projector.

5.3 The projector beam should not be looked at directly.

6. Assessment

6.1 Assessment of children's work in Computing is ongoing. Achievement is reported to parents at the end of each academic year.

6.2 Children's work is saved to the server for reference throughout the year.

6.3 Evidence of work is recorded for all pupils; this may take the form of photographs, printouts of work, videos and saving of work on the computer. Pupils are able to record and collate some examples of work in their “Computing” subject books.

7. Review

7.1 The Headteacher and staff will review this policy in accordance with the development priorities stated in the School's Development Plan. Any suggested amendments will be presented to the governing body for discussion.

November 2017