

Bedenham Primary School

Computing in Schools Policy



June 2014

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1 Introduction

- 1.1 The 2014 national curriculum introduces a new subject, computing in schools, 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 creative, 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 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 the E Safety Polices should also be read in conjunction with the policy.

2 The Nature of Computing

- 2.1 The new 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. 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 pupil 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.
- 2.3 Computing enables pupils to develop problem solving as they progress through the creative but precise process of programming. Children will understand this as debugging – involving trial and improvement.

3 Entitlement

3.1 The new national curriculum states that pupils should be taught to:

	Key Stage 1	Key Stage 2
Computer Science	<p>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</p> <p>Create and debug simple programs</p> <p>Use logical reasoning to predict the behaviour of simple programs</p>	<p>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>Understand computer networks including the internet; how they can provide multiple service; such as the World Wide Web</p> <p>Appreciate how [search] results are selected and ranked</p>
Information Technology	<p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>Use search technologies effectively</p> <p>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 and presenting data information</p>
Digital Literacy	<p>Recognise common uses of information technology beyond school</p> <p>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</p>	<p>Understand the opportunities [networks] offer for communication And collaboration</p> <p>Be discerning in evaluating digital content</p> <p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>

- 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 Bedenham Primary School, coding will be taught as a discrete subject, with digital literacy and information technology taught in a cross-curricular way when planned. If children are finding an aspect of either digital literacy or information technology difficult this will also be taught discreetly. Opportunities may also arise where coding can be taught across the curriculum.
- 4.2 Netbooks distributed across phases will be used to help pupils access the Computing curriculum, along with a range of other resources such as programmable toys
- 4.3 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 the whiteboard projector.
- 5.3 The projector beam should not be looked at directly.

6 Assessment

- 6.1 Assessment sheets will be placed in a 'cohort' folder which will move up with the year group. Assessment sheets will list the 'milestones' needed to have been reached by the end of each year. They will be self-assessed by each pupil and agreed/disagreed by the teacher or LSA.

It is recommended that summative assessment take place twice a term, or at the end of a blocked week. It is recommended that IT/computing be taught in 6 blocked weeks which should be spread throughout the year (at least one per half term). Achievement is reported to parents at the end of each academic year.

(see attached curriculum map for progression

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

7 Review

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

Date 16th June 2014

Signed  Head of School

Date for review Jan 2015