HIGH LITTLETON CHURCH OF ENGLAND PRIMARY SCHOOL

COMPUTING POLICY

Rationale

At High Littleton Church of England Primary School, we will ensure that a high-quality computing education equips the children to use computational thinking and creativity to understand and change the world. The core of computing is computer science, in which children will be 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, children will be equipped to use information technology to create programs, systems and a range of content. Computing will also ensure that children become digitally literate – able to use, and express themselves and develop their ideas through information and communication technology.

Aims

Our aim is to ensure that all pupils:

- can understand and apply the concepts of computer science, including logic, algorithms and data representation
- can analyse problems and have repeated practical experience of writing computer programs
- 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.

We recognise that all classes have children with a wide range of ICT abilities. This is especially true, as most children have access to differing levels of ICT equipment at home. We provide suitable learning opportunities for all children by matching the challenge of the task to the ability and experience of the child.

Attainment Targets
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.

Key Stage 1
Children will be taught to:

- 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
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- 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.

Key Stage 2
Pupils should be taught to:

- 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; 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
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Computing and Inclusion
At our school we teach computing to all children, whatever their ability and individual needs. Computing forms part of the school curriculum policy to provide a broad and balanced education to all children. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talents, and those learning English as an additional language, and we take all reasonable steps to achieve this.

The Computing policy underpins the learning and teaching of computing across all key stages at High Littleton Primary School. It should be read in conjunction with several other policies and documents:

- E-safety policy
- Parent Acceptable User Policy (AUP)
- Pupil AUP
- Staff and Volunteer Helper AUP
- Child Protection Policy

Role of the Subject Leader

- To demonstrate good practice in the teaching of Computing.
- To support colleagues.
- To monitor the teaching of computing in the school by:
  - ✓ lesson observations,
  - ✓ annual work scrutiny
  - ✓ talking with children and staff,
  - ✓ gathering annotated samples of children's work
- To hold staff meetings to discuss relevant matters.
- To refine/re-develop the SOW as necessary.
- To share information and audit training needs of staff.
- To make a yearly Action Plan to focus on specific and identified areas needing development.
- To ensure that resources and equipment are readily available and centrally stored.

Monitoring and Review
The governing body will monitor the implementation of this policy and review the policy every two years.

G Griffith
September 2018
Review Date: September 2020