



HIPPINGS METHODIST PRIMARY SCHOOL

Computing Policy



'As a family we do our best with God in our hearts'
I can do all things through Christ who strengthens me: Philippians 4 verse 13

Our loving school endeavours to provide the best possible all-round education in a Christian setting. We will be a family that does our best with God in our hearts understanding that we are all His children. We aim for all within our school to develop spiritually, morally, academically and culturally.

We value the importance of a high quality computing curriculum. We believe it is important to equip pupils to be able to participate effectively and safely in this digital world. Our computing curriculum ensures that our children are digitally literate – able to use, express themselves and develop their ideas through information and communication technology. We aim to ensure that all pupils are equipped, not only with the skills and knowledge to use technology effectively and for their own benefit, but more importantly – safely. We want our children to understand the consequences of using the internet and also be aware of how to keep themselves safe online. By the time they leave Hippings Methodist Primary School, pupils will have gained key knowledge and skills in the three main areas of the computing curriculum: computer science (programming and understanding how digital systems work), information technology (using computer systems to store, retrieve and send information) and digital literacy (evaluating digital content and using technology safely and respectfully).

Our Computing curriculum has been designed and developed, to cover the National Curriculum across both the Key Stage 1 and Key Stage 2 programs of study. The lessons are sequenced so that concepts are developed in logical steps, with attention given to the fundamental concepts. As children move through the school, we hope for them to develop their computing independence - choosing software and programs suitable for other areas of the curriculum which would best support their learning.

Our Aims:

- To deliver a high quality, rich, broad and balanced curriculum
- To enhance pupils' enjoyment, resilience, understanding and attainment in computing

We aim for all children to:

- Understand and apply important principles of computer science
- Analyse and solve problems
- Evaluate and apply well known and new information technology
- Become safe users of technology, making calculated decisions to help protect themselves and others.
- Be creative and innovative users of technology.
- Be able to use, express and develop their ideas through information technology

Our computing curriculum offers pupils a computing education, designed for mastery, categorised into three strands:

- Computer Science • Information Technology • Digital Literacy

Early Years Foundation Stage

Children are given a broad, play-based experience of computing in a range of contexts, including outdoor play. Computing is not just about computers. Early years learning environments feature Computing scenarios based on experience in the real world, such as, through role-play. Children gain confidence, control and language skills through opportunities to explore, using non-computer based resources such as metal detectors and BeeBots. Recording devices support children to develop their communication skills.

The National Curriculum aims to ensure that all children; Key Stage 1

Pupils should 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

We recognise that all classes have children with widely differing ICT abilities. This is especially true when some children have access to ICT equipment at home, while others do not. We provide suitable learning opportunities for all children by matching the challenge of the task to the ability and experience of the child. We achieve this in a variety of ways, by:

- setting common tasks which are open-ended and can have a variety of responses;
- setting tasks of increasing difficulty (not all children complete all tasks);
- grouping children by ability in the room and setting different tasks for each ability group;
- providing resources of different complexity that are matched to the ability of the child;
- using classroom assistants to support the work of individual children or groups of children.

- using paired or group work to encourage children to work as a team to achieve a shared goal.

Special Educational Needs and Disabilities

Pupils with special educational needs and disabilities have the same computing entitlement as all other pupils and are offered the same curriculum. However, particular application/tools are used for:

- Pupils with learning difficulties who need to be motivated to practise basic skills regularly and intensively.
- Pupils with physical disabilities and communication difficulties.

Monitoring and review

The monitoring of the standards of the children's work and of the quality of teaching in Computing is the responsibility of the Computing subject leader and the Leadership Team. The Computing subject leader is also responsible for supporting colleagues in the teaching of Computing, for keeping informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school. The Computing subject leader regularly discusses the Computing situation with the head teacher and provides an annual summary report in which s/he evaluates the strengths and weaknesses in the subject and indicates areas for further improvement. During the year, the Computing subject leader has specially-allocated time for carrying out the vital task of reviewing samples of the children's work and for pupil conferencing.