



William Gilpin Church of England VA Primary School

Computing Policy

Aims and Objectives

At William Gilpin School, our aims reflect those in line with the National Curriculum as outlined below.

Purpose of study

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.

Aims

The national curriculum for computing aims to ensure that all 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 of 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.*

National Curriculum, 2014

Through teaching computing, we equip children with the skills they need to work confidently and creatively with technology. In a rapidly changing world, where work and leisure activities are increasingly transformed by technology, we enable them to find, explore, analyse and present information and apply computational thinking to problem-solving tasks.

At William Gilpin School, the majority of our pupils demonstrate a high level of computer literacy and are exposed to a rich variety of technology at home. As a result of this, our role as staff at William Gilpin is to quickly assess the pupils' current skill set and provide opportunities for them to extend and enhance their learning. We have a strong focus in school on e-safety and ensuring that all pupils can work confidently and safely online and with increasing independence in the classroom and everyday life.

Teaching and Learning

At William Gilpin, an interactive and practical teaching style is adopted to equip children with the skills necessary to use technology confidently and creatively. Pupils are encouraged to become independent learners and follow their curiosity to develop skills. Teachers demonstrate a high level of subject knowledge to allow them to challenge pupils to explore new methods of communication and computational thinking. Where appropriate, pupils will work in pairs on laptops and other devices to build their confidence and work collaboratively when exploring new programmes. Perseverance and resilience are consistently encouraged and demonstrated.



Through following the 'Purple Mash' units of work, children have opportunities to complete projects, often linked to other subjects too. In addition, by using the Purple Mash scheme of work, children have access to programs, specifically designed for their key stage. This allows children to test ideas, analyse problems and communicate safely at an age-appropriate level. Teachers are expected to have familiarised themselves with the programs prior to teaching and have considered additional challenge where they think this will be required. This may require the use of resources outside of the discussed scheme of work.

Progression

Our computing curriculum is recursive and children revisit the key themes, such as coding, online safety, data handling and communication, multiple times throughout their school experience. This ensures learning is retained in children's long-term memory and that previous learning is built upon continuously.

Through the use of the 'Purple Mash' scheme of work, children are taught units that reflect their stage of development. As we are a mixed age school, this will mean that this is sometimes reflective of their key stage as opposed to exact year group. Within Key Stage One, children revisit the key themes of computing at least twice. These units are progressive. Within Key Stage Two, children revisit the key themes at a deeper level again.

Online safety is covered fortnightly through whole school sessions. These sessions are delivered independently to each Key Stage to ensure that coverage is relevant age-appropriate.

Teachers are also encouraged to use computer software alongside topic work to build cross-curricular links and develop pupils' digital literacy.

The Foundation Stage

Computing in the Foundation Stage is taught through the Understanding the World part of the Foundation Stage Curriculum. Children are provided with opportunities to familiarise themselves with different forms of technology, such as Beebots, cameras and laptops. This allows the pupils to gain confidence in working with technology and helps to prepare them for Computing in Key Stage 1.

The online learning journal Tapestry is used to record photos, observations and comments, in line with the Early Years Foundation Stage, to build a record of the child's experience during their time with us. It allows parents to be involved with their own child's learning as they also receive the images and text which they can respond to and add to. It is hosted by a secure UK portal.

Inclusion

Everything reasonable will be done to ensure that children with disabilities and SEN have as full an access to the computing curriculum as possible.

Health & Safety

At William Gilpin, in line with the National Curriculum, children must use technology in a safe and responsible manner. Pupils each have an individual login to ensure that they can only access secure documents and sources. All networked computers, including laptops, have filtered internet access. All staff should review and evaluate resources available on web sites to ensure that they are appropriate to the age range and ability of pupils being taught.

The school's computers should not be used at any time for downloading, copying or storing illicit or offensive material, nor should video, music or other files which take up a large amount of



space be stored on our server. People wishing to download and copy large files to a CD should discuss it with the subject leader.

Nobody should attempt at any time to install any software of any kind onto the school's network or onto any workstation connected to it, including screensavers. If a member of staff wishes to have software installed the agreement of the subject leader or Headteacher should be sought first, the licence checked and the relevant media handed to the subject leader to arrange for installation. All installations and downloads are carried out or overseen by HARRAP Computing.

All users of the network must be aware that their user areas and individual files may on occasion be accessed by the network administrators and files which contravene any part of this policy may be removed.

Impact

In order to monitor the quality of education within computing, we use a number of approaches. Learning walks and work scrutinies are used to assess the quality of teaching throughout the subject as well as how pupils are progressing towards the National Curriculum attainment targets.

In addition to this, class teachers assess children's progress against curriculum objectives, which are both knowledge and skill based, in line with pupils' understanding of the computing objective being taught. Teachers use formative assessment in the classroom and half-termly foundation subject conferences. Parents receive this information in an annual written report in the summer term.

This policy will be reviewed in the Autumn Term of 2024 or in the light of new legislation.

Date: December 2019