



West Hill Primary School

COMPUTING & ICT POLICY

Let's shine together



Our vision is a school where everyone shines

What we do and encourage as a school family;

Achievement – excellence in teaching and learning which excites and inspires our children to be the best they can be.

Happiness – smiling, engaged and articulate children who are listened to, encouraged and given every support to maximise their own individual potential.

Friendship – children who are kind and caring towards each other, building lasting friendships.

Respect – a respect for people, each others' beliefs, our environment and all living things.

Responsibility – independent, creative thinkers who have the confidence to be responsible for themselves, their behaviour and for others.

Co-operation – working together, listening and valuing others' opinions within the school family and the wider community.

This policy was adopted by West Hill Primary School Governing Board on

30th September 2020

Date of Review	Body responsible for review	Date of next review
Autumn 2023	Subject leader	Autumn 2026

STATEMENT OF SAFEGUARDING CHILDREN

At West Hill Primary School, our school community has a duty to safeguard and promote the welfare of children who are our pupils. This means that we have a Safeguarding Children and Child Protection Policy and Procedures in place which we refer to in our prospectus. All staff including our volunteers and supply staff must ensure that they are aware of our procedures. Parents and carers are welcome to read these on request.

Sometimes we may need to share information and work in partnership with other agencies when there are concerns about a child's welfare. We will always ensure that our concerns about our pupils are discussed with their parents/carers first unless we have reason to believe that this is not in the child's best interests.

There are five main purposes to this policy:

- To establish an entitlement for all pupils;
- To establish expectations for teachers of this subject;
- To promote continuity and coherence across the school;
- To state the school's approaches to this subject in order to promote public, and particularly parents' and carers' understanding of the curriculum;
- To fulfil the school's Mission Statement and Aims.

Introduction

Our Vision for Computing at West Hill Primary School:

To equip all of our pupils with the computing skills, knowledge and understanding which are necessary to:

- help them enhance their learning experiences in all curriculum areas
- help them become creators as well as consumers of digital content
- help them explore new avenues of interest
- take with them into the constantly changing technical world in which they live

The importance of computing technology to the curriculum

Computing prepares pupils to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technology. Pupils use computing tools to find, explore, analyse, solve problems, exchange, present and create information responsibly, imaginatively and with discrimination. They learn how to employ computing to enable rapid access to ideas and experiences from a wide range of people, communities and cultures. Increased capability in the use of computing promotes initiative and independent learning, with pupils being able to make informed judgements about when and where to use computing to best effect, and to consider its implications for home and work, both now and in the future.

Computing is taught in specific timetabled lessons as well as being embedded in the curriculum at West Hill Primary School. This means that it is used, where appropriate, in all other curriculum areas. This ranges from using the Interactive White Board as a class-teaching tool to recording music or images on a device.

Expectations

At West Hill Primary children are assessed throughout the school in line with our criteria based scheme of formative assessment to support pupil attainment and progression in computing. Each Class, from Year 1 upwards, will have an orange book that will include examples of children's work to go up the school with them, thereby showing this progression. The work and child/ren chosen will be at the teacher's discretion. By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the Computing programmes of study.

All Staff are expected to have the computing capability to teach the units of work for their designated Year group and to meet the daily demands of teaching. Where this is not possible training needs to be requested and provision put in place.

The aims of computing and how these contribute to the school's aims

The school aims to:

- provide a relevant, challenging, stimulating and enjoyable curriculum for computing for all pupils;
- meet the requirements of the National Curriculum Programmes of Study for computing;
- use computing as a tool to enhance learning throughout the curriculum;
- respond to new developments in technology;
- make computing a valued environment in our school, which promotes the public image of the whole school and assists pupils in developing a positive self-image;
- use computing to create the flexibility needed to meet the individual needs and abilities of all pupils;
- promote access for pupils with learning difficulties to otherwise inaccessible areas of the curriculum such as individually supportive programs, group work and collaborative learning
- use computing to present information and create content in new ways which help pupils to understand, assimilate and use it more readily.
- understand how content on the Internet cannot be assumed as fact.

Strategy for implementation

Entitlement and curriculum provision

From Year 1 upwards, children are expected to undertake a topic of computer science (coding) via Espresso Coding each term. In most topics, this amounts to 6 lessons. In addition, children are expected to undertake 5 age-appropriate e-safety lessons a year, as directed by the school's long-term e-safety planning. These may be covered through PSHE lessons. ICT skills lessons can be computing-based or cross-curricular. All pupils develop their knowledge, understanding and skills appropriately across the different elements of computing. The school uses the National Curriculum documents to identify relevant links with other subjects, and looks for opportunities to include e-safety (for more details see the section titled 'The Curriculum' below). Key Stage 1, Lower Key Stage 2 and Upper Key Stage 2 each have a set of class Chromebooks to share to cover their curriculums.

Teaching and learning

Pupils are taught about computing through whole-class teaching, involving didactic presentations and practical activities as they progress through the programme of study. They use computing for independent and collaborative tasks for enquiry, problem solving and research when learning in other subjects.

Assessment and recording

All staff assess the skills, knowledge and understanding of pupils' computing using the expected outcomes identified in the school's criteria based scheme of formative assessment. This information is used to inform the annual reports to parents and the end of Key Stage assessments.

Continuity and progression

Continuity and progression is defined clearly in the scheme of work. Consolidation of the skills, knowledge and understanding in computing is carried out by its use to support learning in other subjects, such as literacy and numeracy and by the ability of children to create various types of digital content such as images, films, sound, games and web pages.

Inclusion

Teachers provide either differentiated resources for each task, or learning partners, with extension activities for the higher attainers. Additional classroom support is provided to ensure that all pupils have appropriate access

to the computing curriculum.

Organisation

The school recognises three types of activities using computing:

- Computer Science deals with the understanding and creation of algorithms, coding and the writing and debugging of programs;
- Information Technology deals with the use of technologies which allow children to create, store, manipulate and retrieve digital content;
- Digital Literacy where children learn how to use technology safely and respectfully, to be discerning in evaluating content and to understand the opportunities networks offer for communication and collaboration.

Computing is taught as a discrete subject and a whole-class activity. This is seen as giving all pupils the opportunity to gain computing skills, knowledge and understanding in a structured way, using contexts the pupils are familiar with.

Computing is also used to support learning across the curriculum, but particularly literacy and numeracy. These activities consolidate computing skills, knowledge and understanding by using familiar tools to help pupils develop understanding in unfamiliar contexts, in whole class, collaborative group and individual research-based activities.

All teachers are expected to teach computing and to use computing in teaching and learning activities across the curriculum.

The curriculum

The Department for Education's computing programme of study forms the backbone of the computing curriculum. The use of computing to support learning in other subjects has been planned and new resources to aid curriculum development are constantly under review.

The contribution of computing to other subjects in the curriculum

The school is constantly looking into innovative and creative ways of learning through computing, because it believes that these skills are essential to children's lives now and in the future. High priority is given to the teaching and use of computing and in the school's aims. We believe that computing can help children to develop skills that they can use in, and transfer to, other curriculum subjects, thereby assisting them to become truly independent learners.

During the **Foundation Stage** children use computing to help them further their knowledge and understanding of the world.

At the present time computing is embedded into the discrete curriculum areas as stated below.

Literacy

Computing is used for drafting and revising texts, for word recognition and to present work in different formats to extend literacy activities. At Key Stage 1 interactive books, such as Smartie the Penguin and Hector's World, are available to assist the teaching of different text types and encourage the children to participate more actively. Espresso, Phonics Play and the BBC websites assist in the teaching of phonics. At Key Stage 2 computing

is used to engage the pupils in writing following media presentations.

Numeracy

Computing is used to support the collection and analysis of data, the investigation of number, angles shape and space to provide a flexible approach to numeracy. Decision trees and tables are used to collate and classify different shapes and other information. Graphs are created to display data. IWB activities are taken from The Primary National Strategy site and are supplemented by MyMaths and the 2calculate and 2Investigate programs. Programming and debugging is used to learn codes and embed problem solving skills. Games on Purple Mash may be used to encourage reluctant learners to solve mathematical problems and 'boosters' on MyMaths, as well as activities on NRICH and White Rose can be used to extend children working at greater depth.

Science

The children use Interactive BBC simulations and Espresso to help enhance their understanding of science. They record results in different formats and use 2Simple to help them.

History and Geography

Use of the Internet helps to develop children's enquiry, evaluative and investigative skills. Projects are often word processed or created in PowerPoint, either at home or at school. Rainfall graphs and charts may be devised using software such as Purple Mash or Espresso.

Art & Design, Design and Technology

Children use the Internet, sometimes through the use of IWB presentations, to find out about the works of famous artists, whilst teachers display the work of artists using the Interactive Whiteboard. They use specific art programs to create designs, pictures and patterns for both these subjects, such as 2paint (found on Purple Mash). They use word processing to evaluate their work. The school's iPads are used to excellent effect for creating a variety of images.

Music

Children use the Internet and CDs from Music Express to research information about music from different times and cultures and to study composers. They use keyboards and music software to compose, record and perform music.

Spiritual, Moral, Social and Cultural Development

Pupils discuss, for example, how the limitations of computing make them more aware of what makes us human (for example, "Can computers think?") and help them to recognise their own, and others', creativity and imagination. Through the use of the BBC website children can access Animated Bible Tales and information about other religions. Pupils use computing to help them learn other languages, by listening to native speakers and correct pronunciation contained in high quality software programmes. In addition, their understanding of different cultures and customs is enriched through the use of computing. The use of codes of conduct for using computing in general, and the Internet in particular, supports personal and social education. The use of computing tools, such as databases, DTP and the Internet are used to support health education.

Learning resources

All computers are connected to a curriculum network and have access to software on the fileserver as well as shared access to printers and external access to email and the Internet. Most of the computers (PC systems) are organised in the computer suite and teachers have a desktop and/or a laptop in their classrooms. These are all networked and have exactly the same access to software on the fileserver, to the printers and external access to email and the Internet. All systems are maintained and Health Checked by ScoMIS. There are also iPads available

for class or group work. These can be signed out by a class teacher or LSA as required. There are a further 2 i-pads allocated specifically to Reception Class.

Software and hardware are continually assessed for suitability in teaching the programme of study; all staff have received training in the use of the specific software to meet the needs of the children. The full Microsoft Office is installed which includes Word, Publisher, PowerPoint and Excel, as well as Google software such as Google Docs, Google Slides, Google Sheets and Google Classroom.

The use of Espresso, Purple Mash and MyMaths across the network allows teachers to enhance learning in all curriculum area. Each teacher has access to the staffroom areas of these sites at home and at school. Espresso Coding, Purple Mash and Scratch are installed on all computers to allow for development of coding skills and knowledge, and Python can be accessed via Espresso. From Year 1 upwards, all children will use Espresso for Coding, which can be supplemented with other programs such as Scratch and Lightbot. Upper KS2 will begin to use the HTML and Python sections of Espresso Coding.

The system provides the school with the capability to audit the use of the Internet and application use down to an individual level. This not only provides a monitoring facility for applications and Internet use but also provides the opportunity to adapt teaching plans according to individual needs. Each individual has their own account and manages their own resources including files and printer, which promotes greater progression and independence and develops the children's ability to use transferable skills across the curriculum, through to secondary education and in their everyday lives. The school took the decision not to use a class-based log-on for this reason so that these vital skills are started at an earlier age, allowing children to become familiar with passwords, user IDs and Pin Numbers right from the start of their education, thus providing a valuable stepping stone for the future of each child. Staff also have access to a visualiser for use in their classroom.

All of our PCs, tablets and laptops are owned by the school. They are purchased and updated with money from the school budget and money raised by the school PTFA. This expenditure is identified as central computing costs and is not allocated to the annual ICT development and maintenance budgets.

The senior administrator manages a budget, in liaison with the subject leader and finance governor, comprising: an annual maintenance budget and funds to keep software, additional peripheral equipment and sundry materials up to date. The full Governing Board is kept informed of the budget and need to authorise any large expenses

Staffing

Teachers are responsible for ensuring that all tasks in the programme of study are carried out. The Headteacher and computing subject leader are responsible for facilitating the training of colleagues and for monitoring attainment. Day-to-day troubleshooting of systems (e.g. checking paper and inks in printers) is the responsibility of all staff as appropriate. More serious technical issues are covered by a support contract with the school's technician and ScoMIS.

The learning environment

Classrooms and the former ICT suite have examples of work mounted on walls to stimulate pupils' creative abilities. This is related to the work in hand and is changed in accordance with the Display Policy.

Safe practice

The school follows the health and safety recommendations made by Devon County Council in its publication "Computers in Educational Establishments". Health and safety awareness forms an integral part of pupils' learning in computing.

The school implements policies for acceptable use of the Internet and email as recommended in Devon County Council documents. Pupils are shielded from inappropriate materials on the Internet by means of the filtered router provided by SWGfL as part of the ScoMIS service. Where an incident occurs, the computing lead is to be informed and the incident logged via CPOMs. Use of the Internet is not allowed at any time, without supervision from a teacher, learning support assistant or a parent. The computing co-ordinator and teachers use the CEOP material, or other age-appropriate material to teach pupils about online safety. All pupils sign up to a Safe Code of Conduct. The Code is age-appropriate and signed at the start of each academic year.

Extension or extra-curricular opportunities

Pupils can use computing outside normal school hours, at lunchtime or after school, by appointment. However, they should only use the Internet when supervised by a member of staff.

Homework

Pupils have many opportunities to use computing at home. All pupils are given logins so that they can access to Espresso, Purple Mash and MyMaths at home. Some members of staff set specific homework tasks using one or more of these sites. Other staff set more generic research type of homework but guidance about appropriate sites is given.

The role of parents and carers

Parents and carers may be involved with their pupils' learning in computing through home / school links. If there are appropriate computing facilities at home, teachers give advice so that the home use of computing complements and consolidates pupils' experience in school.

Parents are encouraged to consider online-safety and have been provided with safety guidelines. Regular safety information is given to parents at 'Meet the Teacher' events and information through the school's newsletter. Where possible, online safety information events are organised for upper KS2 and parents.

Leadership and management

Staff development and training opportunities

The computing skills' needs of staff are identified through a needs' analysis activity conducted annually. The computing subject leader addresses these needs through after-school and / or Inset training sessions (supported where appropriate by the Babcock's computing team).

Leadership and management roles

The headteacher is responsible for the implementation of the computing policy, whilst the computing subject leader is responsible for day-to-day management. Curriculum discussions about standards, provision and developments take place each term.

The computing governor, headteacher and computing subject leader are responsible for monitoring, reviewing and advising the governing body about the effectiveness of the policy and development plan for computing.

How the subject is monitored and evaluated

The governor with responsibility for computing, the headteacher and the computing subject leader monitor the implementation and effectiveness of the computing policy as a basis for pupils' learning. The impact of the tasks within the programmes of study on pupils' computing capability, and their ability to use computing to support learning in other subjects, are measured against the success criteria within each unit of work.

Where the impact is less than expected, the contributory factors are identified and addressed. Teaching staff are asked to use their assessment data to evaluate the effectiveness of the scheme of work.

Review

This policy will be reviewed every three years in line with the school's policy review programme. The subject leader is responsible for reporting to the governors' curriculum committee about the quality of its implementation and its impact on standards. In the light of this, policy amendments may be made.

Links to administrative systems

Currently, the school uses computing for storing assessment data through the Scomis Hosted Applications program. The administrative network is separate from the curriculum network. However, data can be transferred to the staff resource area on the curriculum network to enable teachers to enter and analyse data more easily. The school uses Devon County Council's FMS6 financial management programme. The Scomis Hosted Application program is used for pupil and staff records and data, including 'attendance' and 'dinner money'. Assessment Manager is used to transfer data between the LA and feeder schools.

After hours and community use

Pupils are encouraged to use curriculum systems during lunchtime and after school, where appropriate, for homework or independent research.

Useful Publications

Computing programmes of study: key stages 1 and 2 – available from <https://www.gov.uk/government/publications/national-curriculum-in-england-computing-programmes-of-study/national-curriculum-in-england-computing-programmes-of-study> [accessed 25/6/2014]

Computing in the national curriculum – Naace ; <http://primary.naace.co.uk/>

CEOP Annual Review.

Safeguarding children online

Safety and Security SWGfL

School E-Safety Policy SWGfL

Family e-safety kit Taming the Web - insafe

Cyberbullying A whole-school community issue – DCSF – 00685-2007

360° Safe

Please also read in conjunction with the following West Hill Policies:

West Hill Primary School	Safeguarding and Child Protection Policy
--------------------------	--

West Hill Primary School	School Internet Policy and Internet Code of Conduct
--------------------------	---

West Hill Primary School	Acceptable Behaviour Policy
--------------------------	-----------------------------

West Hill Primary School	Internet safety
West Hill Primary School	Acceptable use of Photographic Images
West Hill Primary School	Data Protection Policy and Information Sharing
West Hill Primary School	Publication Scheme
West Hill Primary School	Policy on Mobile Phones in School
West Hill Primary School	All Curriculum Policies