Woodlands Primary School

COMPUTING POLICY & STATEMENT OF INTENT

Status:	Current	
Date Adopted by Governing body:		
Created by Eleanor Roe	April 2022	
Review by Curriculum Committee:	April 2024	2 years

1. Statement of Intent

At Woodlands Primary School, we regard computing as an important subject to teach because of the ever-growing amount of technology in children's everyday lives. Through teaching a broad and balanced computing curriculum, we equip our children to participate in our rapidly-changing technology-focussed world. We follow the National Curriculum through the iCompute Scheme of Work. We aim to make computing accessible to all children and deliver lessons across a variety of technology, including laptops, Chromebooks and tablets.

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.

Implementation

Each class teaches computing in week-long blocks focussing on one topic. EYFS use stand-alone activities to complement their teaching of the Early Learning Goals. Children will work independently or in pairs when using digital devices and may work in slightly larger groups for activities not requiring a digital device. Children learn how to use computers, software and the internet as well as gaining an understanding of how computers work. Being computer-literate can help children to increase their confidence and creativity and we intend to give children every opportunity to achieve this.

Impact

Computing will be evidenced in a number of different ways, depending on the unit and lesson. Some units will have worksheets that will be recorded in their CFL books, alongside other topic work. Other units will have work that can be saved online or on the devices (Student Share). Some units will progress towards a single piece of work. Children are equipped with computational thinking that can support them both in school and beyond school. They 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).

2. Teaching and Learning

Lessons are taught in week-long blocks and the skills are built on each year. Every year group teaches units on staying safe online and programming. Lessons are taught on laptops, Chromebooks and tablets. When on digital devices, children will work individually or in pairs.

These are the units that KS1 and KS2 will work through over the year:

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Safe	Safe	Safe	Safe	Safe	Safe
Algorithm	Search	Network	Algorithm	Web	Network
Program	Program	Program	Program	Program	Program
Draw	Pub	Data	Data	Draw	Data
		Simulate	Animate	Model	Model

3. Assessment

Assessment for learning is continuous throughout the planning, teaching and learning cycle. It is supported by using the following strategies:

- Observing children at work, individually, in pairs, in a group and in class during whole class teaching.
- Using differentiated, open-ended questions that require children to explain and unpick their understanding.
- Providing effective feedback, including interactive marking through green pen questions/marking where appropriate, to engage children with their learning and to provide opportunities for self-assessment, consolidation, depth and target setting.
- Work moderation and monitoring of outcomes of work, to evaluate the range and balance of work and to ensure that tasks meet the needs of different learners, with the acquisition of the pre-identified key knowledge of each topic being evidenced through the outcomes.
- Use of learning questions and success criteria for each lesson with child and teacher review of the agreed success criteria.
- Progression and achievement is tracked against learning objectives and is recorded on the INSIGHT assessment tracking system. For each lesson, the learning question links directly to an INSIGHT objective.

4. Planning and Resources

Computing resources are stored in the RWI room and in the Shared Area. It is the responsibility of the teacher to ensure all devices are plugged in and charging before and after a lesson. The school is using the iCompute Scheme of Work; this can be found online and relevant software has been downloaded onto relevant digital devices. Everything required for each lesson is saved on the school system for easy access. Classes have their own logins for the Chromebooks and laptops so every child can access the devices. Google Classroom can be used to support the computing teaching where appropriate.

5. Organisation

Computing is taught as week-long units on 3.5 to 4 afternoons. It is taught predominantly by the class teacher and sometimes by an HLTA. The units of work are from the iCompute curriculum; with EYFS, it can be linked to other curriculum subjects. Information Technology

may also be used in other curriculum areas to support learning, however this is kept distinct from and is in addition to the computing curriculum.

6. The National Curriculum

KS1

In 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.

KS2

In 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.

7. Equal Opportunities

At Woodlands Primary School, we are committed to providing a learning environment which ensures all children are provided with the same learning opportunities regardless of social class, gender, culture, race, special educational need or disability. Teacher use a range of strategies to ensure inclusion and also to maintain a positive ethos where children demonstrate positive attitudes towards others.

Support for specific individuals is well considered and planned for, with consideration given to how greater depth and further challenge can be provided for and demonstrated by children who require further challenge.

8. Inclusion

All pupils are entitled to access the computing curriculum at a level appropriate to their needs.

To ensure inclusion, independent tasks and teaching are well-adapted to ensure full accessibility, as well as to provide appropriate challenge to different groups of learners. The school makes full use of additional adults who are deployed effectively to ensure that identified children are able to make progress in each curriculum area, according to their full potential.

Opportunities for enrichment are also fully utilised, to ensure a fully inclusive and engaging computing curriculum.

9. Role of the Subject Leader

The subject leader's responsibilities are:

- To ensure a high profile of the subject.
- To plan and regularly update the Computing Subject Action Plan.
- To ensure a full range of relevant and effective resources are available to enhance and support learning through the iCompute curriculum.
- To ensure progression of the key knowledge and skills identified within each unit and that these are integral to the programme of study and secure at the end of each age phase.
- To monitor pupil work/books in computing and ensure that key knowledge is evidenced in outcomes, alongside and as supported by the SLT. This includes carrying out a work scrutiny for each unit of computing work.
- To ensure staff receive prompt feedback and make sure that staff achieve the development points that they are given.
- To monitor planning and the quality of computing teaching.
- To lead further improvement in and development of the subject as informed by effective subject overview.
- To ensure that the computing curriculum has a positive effect on all pupils, including those who are disadvantaged or have low attainment.
- To ensure that approaches are informed by and in line with current identified good practice and pedagogy.
- The subject leader will attend relevant training for curriculum leaders and share information with staff.
- To ensure CPD is in place through working with the head teacher/ leadership team and at staff meetings.
- Assessment - The leader will also monitor staff use of the INSIGHT Assessment tracking system. Evidence will be kept from year to year.
- To work closely with the lead governor for computing (providing appropriate support

and challenge) and ensure that they meet at least three times every academic year (once every old term).

10. Displays

The school promotes the displaying of computing work in the corridor areas. It can influence how children feel about their environment, convey standards and promote high expectations. We use displays to celebrate achievement and support teaching and learning.

Displays should communicate ideas, stimulate interest, celebrate children's work, reflect the ethos of the school and respond to the children's interests.