



Willow Wood Community Primary School Computing Policy

Introduction

The use of information and communication technology is an integral part of the National Curriculum and is a key skill for everyday life. In an increasingly digital world there now exists a wealth of software, tools and technologies that can be used to communicate, collaborate, express ideas and create digital content. Computers, laptops, tablets, programmable robots, digital and video cameras, VR headsets etc. are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Willow Wood Community Primary School we recognise that pupils are entitled to access high-quality hardware and software and a structured and progressive approach to the learning of the skills and knowledge needed to enable them to use it effectively, safely and considerately. We recognise that pupils are entitled to a broad and balanced computing education with a structured, progressive, approach to the learning of how computer systems work, the use of technology and the skills necessary to become digitally literate and participate fully in the modern world. The purpose of this policy is to state how the school intends to make this provision.

Aims

Our aims are to:

- Provide a relevant, sequential, challenging and enjoyable curriculum for all pupils.
- Develop pupil's computational thinking skills that will benefit them throughout their lives.
- Meet the requirements of the National Curriculum Programmes of Study for Computing at Key Stages 1 and 2.
- Use digital devices and computing as a tool to enhance learning throughout the curriculum.
- To respond to new developments in technology (E.g. AI tools).
- To equip pupils with the confidence and capability to use digital tools and technologies throughout their lives.
- To enhance and enrich learning in other areas of the curriculum using technology and computing.
- Teach children the difference between information, disinformation, misinformation and conspiracy.



- To develop the understanding of how to use computers and digital tools safely and responsibly.

The National Curriculum for Computing aims to ensure that all pupils:

- Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication.
- 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.

Rationale

A high-quality computing education equips pupils to use computational thinking, information technology and digital literacy to solve problems, express their ideas and engage safely in a rapidly changing world. Our curriculum is designed to help children understand how technology works, how to use it to achieve specific goals, and how to make informed, respectful decisions in the digital realm. Through computing teaching, pupils will explore finding their own voice through digital creation, problem-solving and ethical decision-making.

Through computing, children learn to think logically and systematically, gaining the skills to break down complex problems and build solutions. They learn to design and create digital content, from simple animations to more complex data handling and programs. They also explore the impact of technology on society and develop the skills to participate safely and respectfully in online communities.

We aim for pupils to be:

- **Confident thinkers:** Able to understand and apply the core concepts of computer science, including logic, algorithms, and data representation.
- **Practical problem-solvers:** Who can analyse challenges and use programming and digital tools to create meaningful outcomes.
- **Responsible digital citizens:** Who communicate safely, respectfully and creatively, recognising their rights and responsibilities in a connected world.

At Willow Wood Community Primary School, computing is more than a technical subject - it is a means for children to understand the world around them, contribute



meaningfully to it and explore their own identity and ideas. Our curriculum reflects the local and national context, while looking ahead to the demands of the future. We want our pupils to leave primary school with the knowledge, understanding and mindset to thrive as learners and leaders in the digital age.

Objectives

Early years

It is important in the foundation stage to give children a broad, play-based experience of computing in a range of contexts, including outdoor play. Computing is not just about computers. In the Early years, computing is embedded within the Understanding the World area of learning and is closely linked to Communication and Language and Expressive Arts and Design. Early years learning environments should feature computing and digital device scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to 'paint' on the whiteboard or programme a toy. Recording devices can support children to develop their communication skills. This is particularly useful with children who have English as an additional language. EYFS has access to their own suite of iPads.

Key Stage 1

By the end of 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 a sequence of 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 online, keeping personal information private; identify where to go for help and support when they have concerns or contact on the internet or other online technologies.

Key Stage 2

By the end of 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; generate appropriate inputs and predicted outputs to test programs.
- Use logical reasoning to explain how 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.
- Utilise web design, radio and film making software.
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Resources and access

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible computing system by investing in resources that will effectively deliver the objectives of the National Curriculum and support the use of technology, computer science and digital literacy across the school. Teachers are required to inform OneIT Technical Support Help Desk and the computing subject leader of any faults as soon as they are noticed. Resources, if not classroom based, are located in the trolleys in the corridor. IT and computing network infrastructure and equipment has been sited so that:

- Each phase has access to an iPad trolley and a laptop trolley with 30 devices in each.
- Each class from Year 1 – Year 6 has a weekly lesson for teaching of specific technology and computing skills.
- Pupils may use technology and computing independently, in pairs, alongside a TA or in a group with a teacher. Adults should be able to see the pupil's screens to monitor activity.



- The school has a technology and computing technician who is in school regularly to ensure that the equipment is working correctly.

Planning

As the school develops its resources and expertise to deliver the computing curriculum, modules will be planned in line with the National Curriculum and will allow for clear progression. Modules will be designed to enable pupils to achieve the stated objectives of the National Curriculum as well as any designed for delivery through events such as Online Safety Week. Pupil progress towards these objectives will be recorded by teachers as part of their class assessment recording system. During any teaching activities staff should bear in mind that special arrangements could be made available to support individual pupils.

As digital information becomes increasingly complex, children are more frequently exposed to misinformation (false information shared without intent to harm), disinformation (false information deliberately created to mislead), and conspiracy content. In line with the online-safety expectations set out in *Keeping Children Safe in Education (2025)*, our school recognises that these forms of harmful or misleading content can influence children's beliefs, behaviour, wellbeing and sense of safety.

Within computing and digital learning, pupils may encounter manipulated images, misleading videos, AI-generated content, false narratives or material designed to provoke strong emotional responses. Such content can contribute to online manipulation, fear or distress, discriminatory attitudes, extremist views, or unsafe online conduct.

To safeguard pupils and promote responsible digital citizenship, this Computing Policy requires that:

- Pupils learn how to recognise, question and critically evaluate online information, including sources that seem authoritative or "viral."
- Pupils must not create, share or promote misleading content, conspiracy material, doctored media or information intended to cause harm, fear or confusion.
- Staff model critical digital literacy skills and support pupils in distinguishing fact, opinion, bias, satire and deliberate manipulation.
- Any concerns about a pupil's engagement with harmful online narratives, including extremist or radicalising content, must be reported immediately through the school's Child Protection Policy and safeguarding procedures.
- School-approved teaching materials, filtering and monitoring systems will be used to reduce exposure to harmful misinformation and to provide safe, age-appropriate environments for research and digital learning.



Our approach ensures that children develop the skills and confidence to navigate online information safely, responsibly and ethically, reinforcing our commitment to safeguarding in a digital world.

There is a specific lesson design for computing to ensure consistency and equity.



1.Retrieval and Retention	Provide a starter that recaps and reviews prior learning and consolidates knowledge e.g. what have you learned last week, last topic or last year? Encourage children to explain what they can remember by using the correct vocabulary – displaying word banks would help with this as well as providing prompts.
2.Purpose and Sequencing	Explain the concept you are teaching and the purpose of the lesson and how it fits into the bigger picture and wider aspects of computing – which strand does it fall into - computer science (programming and understanding how digital systems work), information technology (using computer systems to store, retrieve and send information) or digital literacy (evaluating digital content and using technology safely and respectfully). Ensure that all children are explicitly aware of the aim of the lesson. Ensure that all children are working towards securing gaps in their learning by building on prior knowledge, dropping back steps if needed but all children should be working towards the same objective.
3.High Expectations and Communication	Ensure you 'teach to the top' with high and ambitious expectations. Scaffolds, including practical resources, must be provided to support learning. Ensure instructions are concise, using the correct computing vocabulary, and communication is clear and that language is positive and encouraging. Questions need to be targeted and illicit well thought out responses. Make sure you allow discussion time, where appropriate, as well as thinking time.
4.Knowledge and Deliberate Practice	Ensure you are explicit about the core knowledge, vocabulary and small steps in learning you are teaching to the children and how this will be built on lesson by lesson. Ensure this is communicated to pupils during the lesson and links throughout the block of learning are explored and revisited. Ensure you are offering and allowing pupils opportunities to practice and develop their computing thinking: allowing them time to explore and experiment with the software as well as time to evaluate and debug is crucial.
5.Modelling and Questioning	Ensure new concepts and ideas are presented in small steps and that you are explicitly modelling and showing pupils what 'success' looks like. Ensure probing questioning is used to aid computational thinking and discussions. Use explanation, timely intervention and peer support to address misconceptions at the point they are made to ensure there is a drive for whole class understanding.
6. Key Vocabulary	Ensure that there is an explicit focus on improving and developing vocabulary throughout the whole lesson, modelled by all adults within the classroom. Encourage and check for new technical vocabulary to be applied to all work, displaying these when needed to allow the children to accurately use them.
7. Metacognition and Self-Regulation	Ensure you are explicit in communicating and teaching effective learning strategies that children can adopt themselves in independent work and at home. Ensure that you are active in explaining 'computational thinking' to children. Ensure that when ready, scaffolding is gradually removed to develop children's independence and confidence. Ensure lessons are inclusive for all.
8.Feedback and Review	Ensure feedback is clear and timely. It needs to be manageable, specific and targeted. Ensure formative assessment is acted upon and that you are constantly aiming to gain as much feedback as possible from children during the lesson. Ensure that a plenary activity reviews information from the lesson and indicates next steps (whether that is moving on or consolidation / review work). It is imperative that time is then given at the beginning of the following lesson to review any errors and correct these before beginning the lesson. Make sure children have saved their work in an easily accessible place to allow you time to review the work before the next lesson. During the lesson, take pictures to capture in the moment learning and create PicCollages with the learning intentions on which can be used to review learning at each stage by both staff and children.



Assessment and record keeping

Teachers regularly assess capability through observations and the assessment of completed work. Assessing computing work is an integral part of teaching and learning and central to good practice so that staff are aware of the progress pupils have made and areas which require further consolidation. It should be process orientated – reviewing the way that techniques and skills are applied purposefully by pupils to demonstrate their understanding of the concepts related to technology and computing. As assessment is part of the learning process it is essential that pupils are closely involved and access support and feedback throughout lessons to allow for improvements and adjustments to be made.

The role of the subject leader:

- To ensure the school website is compliant in line with Ofsted's and the DfE's requirements and that it is updated regularly with statutory policies and any other information that would enhance its value as the corporate face of the school.
- To ensure our Facebook account is updated with news regularly and is monitored for appropriate use.
- To ensure only pupils with appropriate permissions appear on Facebook, the website and other communications.
- To ensure the implementation of the Computing policy across the school.
- To offer help and support to all members of staff (including teaching assistants) in their teaching, planning and assessment of computing.
- To maintain resources and advise staff on the use of materials, equipment and books.
- To monitor classroom teaching or planning following the school's rolling programme of monitoring.
- To monitor the children's computing work, looking at samples of different abilities.
- To work with the headteacher and governors to ensure that resources are replenished and replaced on a rolling programme.
- To ensure all repairs and maintenance is carried out within an appropriate time frame and only by approved contractors. To lead staff training on new initiatives.
- To attend appropriate in-service training and keep staff up to date with relevant information and developments.
- To plan and lead appropriate training on school wide and bespoke systems.
- To keep parents and governors informed on the implementation of computing in the school.



- To update curriculum policies, acceptable use policies for staff, children and volunteers, parental permission documents and other documents in line with Statutory guidance as required.
- Ensure all staff complete annual Cyber Security training and Display Screen Evaluations as required through Health and Safety.
- Ensure all staff are aware of the risks of Com Networks, including recognising signs and behaviours of exploitation, cybercrime and online harms.
- Investigate any misuse of computing equipment or software by children whilst using technology.
- Ensure school has the appropriate number of licences to legally operate the devices and programmes we do.
- Provide a termly report for the Headteacher, Senior Leadership team and governors.

Security

Under the statutory guidance ‘Keeping Children Safe in Education (2025)’, safeguarding provision in our school must include robust measures to ensure children’s safety online and when using digital technology. This means that the school must put in place ‘appropriate filters and appropriate monitoring systems’ and regularly review their effectiveness, to reduce children’s exposure to illegal, inappropriate or harmful content via the school’s IT systems. [GOV.UK+2GOV.UK+2](#)

Furthermore, the guidance Cyber security standards for schools and colleges requires the use of a correctly configured boundary (or software) firewall and centrally managed, up-to-date anti-malware protection across all school-managed devices and digital services so as to safeguard personal data, maintain the integrity of systems, and prevent unauthorised or malicious access. [GOV.UK+1](#)

These measures — filtering, monitoring, firewalls, device-security and regular review — must be treated as core components of our safeguarding framework rather than optional technology extras. In doing so, we help ensure that our children’s online experiences while on school premises (or using school-managed equipment) are as safe as their physical environment.”

- The technology and computing technician will be responsible for working with the subject leader to ensure that anti-virus software is updated regularly.



- Use of digital devices and computing will be in line with the school's 'acceptable use policy'. All staff, volunteers and children must sign a copy of the schools Acceptable Use Policy.
- Parents will be made aware of the 'acceptable use policy'.
- All pupils and parents will be aware of the school rules for responsible use of digital devices and computing and the internet and will understand the consequence of any misuse.

Safeguarding

Safeguarding is central to all aspects of computing at our school. We are committed to ensuring that all pupils learn to use digital technologies safely, responsibly and respectfully. In line with statutory guidance, our school implements appropriate filters and monitoring systems to minimise children's exposure to illegal, inappropriate or harmful online content when using school-managed devices or accessing the internet in school.

We recognise that pupils increasingly encounter a wide range of online risks, including misinformation, disinformation, manipulated media and harmful digital narratives. Our Computing curriculum teaches children how to recognise, question and critically evaluate online information, helping them distinguish fact from opinion, bias, satire, or deliberate manipulation. Staff model responsible digital behaviour and ensure pupils understand the importance of not creating, sharing or promoting misleading or harmful content online.

Where there are concerns about a pupil's engagement with harmful online material—including extremist or radicalising content—staff will follow the procedures outlined in the school's Child Protection Policy. Such concerns must be reported immediately through the school's safeguarding procedures.

To maintain digital safety, the school ensures the use of secure systems, including firewalls, anti-malware protection, and safe device configuration, as required under national cyber security standards. All staff, volunteers and pupils are required to follow the school's Acceptable Use Policy, and parents are made aware of these expectations to support safe digital practice at home and school.

Our safeguarding approach in Computing promotes confident, responsible digital citizens who can navigate online spaces ethically and safely in an ever-evolving technological world.

Monitoring

Monitoring is carried out by the Head Teacher, a member of senior leadership team, the safeguarding governor or the Computing leader, in the following ways:



- Informal discussion with staff and pupils.
- Work sampling.
- Classroom observation.
- Learning walks.

The monitoring of the standards of children’s work and of the quality of teaching in computing is the responsibility of the Computing subject leader. The work of the subject leader also involves supporting colleagues in the teaching of Computing, being informed about current developments in the subject and providing a strategic lead and direction for the subject in the school. The Computing subject leader gives the headteacher a termly report in which they evaluate the strengths and weaknesses in the subject and indicates areas for further improvement. The Computing subject leader has specially allocated, regular leadership time in order to review evidence of the children’s work and undertake lesson observations of Computing teaching across the school.

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