Oakhyrst Grange School

Computing Policy

Date Reviewed:	28.06.2026
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Policy Owner:	Faye Dance
Ratified @ FGB/Committee Name& Date:	School Policy

Date	Amendment	Staff Member

Mission Statement

We are committed to providing a supportive, enjoyable and family style environment in which every child is nurtured and encouraged to achieve their potential through a broad-based curriculum and opportunities for developing sporting, dramatic, artistic and musical talents.

Statement of Aims & Objectives

- To enable each child to fulfil their own academic and personal potential.
- To instil in every child the importance of developing personal initiative and to foster in them a belief that they can fulfil their potential in any area of school life.
- To provide a broad based academic and extra-curricular education that is delivered in such a way as to satisfy the learning needs of each and every pupil.
- To help each pupil to develop both a set of Christian values and an understanding and appreciation of other religious beliefs.
- To learn the difference between right and wrong and to appreciate that rights and responsibilities are equally balanced.
- To develop and promote a sense of caring and community between the pupils within the school and the wider community as a whole.
- To instil in each pupil a high degree of self-respect and respect for their fellow pupils, teachers and other adults.
- To prepare each child for the transition to the next stage of their education and to be able to take advantage of any opportunities as they present themselves.

Safeguarding

Oakhyrst Grange School is committed to safeguarding and promoting the welfare of children and young people and expects all staff and volunteers to share this commitment. At this school we respect and value all children and are committed to providing a caring, friendly and safe environment for our pupils so that they can learn in a relaxed and secure atmosphere. We believe that every pupil should be able to participate in all school activities in an enjoyable and safe environment and be protected from harm. This is the responsibility of every adult employed by, or invited to deliver services at Oakhyrst

Grange School. We recognise our responsibility to safeguard all who access school and promote the welfare of all of our pupils by protecting them from physical, sexual and emotional abuse, neglect and bullying. This should be read in conjunction with the Safeguarding Policy.

All staff will be asked to complete training annually following KCSIE updates. Further safeguard training will take place throughout the year. All staff must wear their lanyards at all times.

The Safeguarding governor is: Pauline Clark Pauline.clark@oakhyrstgrangeschool.co.uk

DSL: Roxann Dowling (Head of EYFS)

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This policy outlines our school's vision, aims, guiding principles, and strategic approach to the teaching of Computing and the integration of technology across the curriculum. We are committed to equipping all children with the digital skills, knowledge, and understanding necessary to thrive in an increasingly technological world. Through a broad and balanced Computing curriculum and the purposeful use of digital tools, we aim to foster creativity, critical thinking, collaboration, and responsible digital citizenship.

This policy provides an overview of the Computing Curriculum and outlines the programme of study across all Key Stages, offering a structured framework for progression and development in computing education.

The national curriculum for Computing has four main 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 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.

Contents

Computing and the Curriculum

Early Years Foundation Stage (EYFS)

Computing

Computing does not always need to involve a computer. In EYFS, it is primarily centred around play-based learning that nurtures children's foundational skills. Rather than focusing on digital devices, the emphasis is on developing key competencies such as listening, curiosity, creativity, and problem-solving. These skills are essential for future engagement with technology and computational thinking. Evidence can also be gathered towards the Early Learning Goals for each area of learning. For example, Programming - About algorithms, debugging and sequencing:

- Following instructions-playing a game like Simon says.
- Giving simple instructions-to turn left or right, straight on, step over etc.
- Provide children with a storyboard set of instructions that contain deliberate errors in the sequence (e.g., steps for washing hands with one or more steps out of order). The task is for children to identify and correct the mistakes, helping them develop logical thinking and sequencing skills.

Curiosity & Creativity:

- Taking photographs using a camera or tablet
- Creating digital artwork
- Storytelling with puppets
- Voice recorder
- Listening to music

Online Safety

EYFS children engaging with digital platforms must be equipped with the knowledge and confidence to navigate online environments safely. The following key areas are discussed for fostering responsible and secure online behaviour:

- Be SMART
- Trusted Adults
- Read stories like DigiDuck, Adventures of Smartie the Penguin by Childnet International, Chicken Clicking by Jeanne Willis to learn about, for example
    - Responding to upsetting content,
    - Identify unreliable information,
    - Protection personal information.

Foundation Digital skills

There are also opportunities to explore and use technology to develop foundational digital input skills by effective use of keyboards, mice, and touchscreens to interact with digital devices.

- Playing interactive games or using drawing software on the interactive whiteboard, with a pen or finger input.
- BusyThings - Simple drag-and-drop activities, using shape-based games, to develop precision and hand-eye coordination with a mouse. In addition,
    - Pixel Art activity can also develop their spatial awareness and creativity to make patterns and images of their own
    - Colourings allows children to experience different patterns and textures
    - Use Music mixer to drag monsters up and down adjusting the volume

Key Stages 1 and 2

Digital Literacy
The planning, organisation and delivery of the Computing curriculum is supported by Switched on Computing Scheme. Switched on Computing Scheme is designed to align with the UK National Curriculum and helps teachers deliver engaging, progressive lessons in areas like:

- Computer science (e.g. coding, algorithms)
- Information technology (e.g. using software tools)
- Digital literacy (e.g. online safety, responsible use)

Real-Life Problem Solving
Each unit encourages pupils to solve real-world problems using digital tools. e.g. children might produce a digital music composition that naturally links computing with subjects like music and art.

Progressive Learning Pathway
From simple Bee-Bot programming in Year 1 to more advanced Scratch projects with programmable devices in later years, the curriculum builds on prior knowledge while connecting to broader learning goals. This spiral approach supports both computing and general cognitive development.

Each year group delivers two units from the scheme. Each unit encompasses a range of learning outcomes, enabling pupils to demonstrate progress across multiple objectives outlined in the programme of study.

Microsoft Office
Students will begin using Microsoft Office as part of their ICT curriculum. Developing proficiency in Microsoft Office is essential, as it equips children with the foundational skills required to create, format, and manage digital documents effectively. This competency is vital for their continued academic success and future professional pursuits.

Online Safety
To support the teaching and learning of online safety, we utilize flashcards that we have developed in-house and using resources from e.g. Childnet, SWGfL, Safer Internet.
Examples of online safety topics:

- SMART - Watch “The Adventures of Kara, Winston and the SMART Crew” by Childnet for 7 to 11 year olds
- The importance of passwords and understanding safe login and keeping personal information private
- Safe searching online – using web browser like Kiddle or Swiggle for KS1
- What to do if encountering upsetting content online
- Fake news and photos
- Different types of Phishing

Key Stage 1

Principles of computers:
Children will learn about the main parts of a desktop computer, peripherals and their functions.

Developing Keyboard literacy and mouse skills:
When children can begin to use the computer, they need to have to develop some keyboard fluency. Proficiency in typing equips children to navigate the digital landscape with greater efficiency and confidence. Within an academic context, this skill enhances productivity, improves the quality of

written work, and enables more effective use of educational technologies. Thus, typing is not merely a tool for composing assignments, it is a foundational competency for digital fluency.

- Touch typing using typing apps like BBC Dance Mat
- Use Microsoft Word to enhance their typing proficiency and develop essential file management skills, including how to save and retrieve documents effectively.
- Mouse skills using drag and drop, click and double click games

Year 1

Switched on Computing - We are treasure hunters (Coding)
This progression outlines the developmental journey from EYFS children learning to follow verbal instructions to engaging with programmable devices, Bee-Bots, which require precise and sequential commands. This integrates key aspects of communication, cognitive development, and the foundations of computational thinking. Through structured activities, children advance from understanding and responding to simple instructions to planning, sequencing, and debugging commands, thereby fostering early problem-solving and logical reasoning skills.

Switched on Computing - We are rhythmic (Music)
This progression builds upon the "We Are Treasure Hunters" unit, advancing children's computational thinking through using ScratchJr on iPads. ScratchJr is a block-based programming platform designed for children aged 5 to 7. Through this unit, children will further develop their programming skills by learning about different types of digital music and how to record and play back audio using sprites. They will also begin to construct repeated sequences, enhancing their understanding of loops and automation.

Year 2

Switched on Computing - We are astronauts (Coding)
This unit continues the development of children's programming skills as they create a scripted animation using the Scratch offline editor on desktop computers in the ICT suite. Children will be introduced to the fundamental computer model of input–instruction sequence–output, which underpins basic programming logic. Throughout the unit, children will be encouraged to adopt a structured approach to coding through the plan–code–predict–test–debug cycle. This process supports the development of problem-solving skills, logical reasoning, and resilience in computational tasks. In addition, children will learn how to save their work on the school's local server.

Switched on Computing-We are photographers (Art)
In this unit, children are introduced to the fundamentals of digital photography using iPads. They will learn how to take photographs with consideration for composition, specifically applying the rule of thirds to enhance visual impact. Pupils will use the built-in camera app to edit their images, including techniques such as pixelation and other enhancements to improve clarity and artistic expression. Additionally, children will be encouraged to evaluate photographs by considering both their technical quality and artistic merit, fostering critical thinking and creative decision-making in digital media.

Key Stage 2

Year 3

Switched on Computing - We are programmers (Coding)
Building on their learning from Key Stage 1, children will develop the ability to plan and create an algorithm for an animated scene in the form of a storyboard. They will also be introduced to key computing concepts such as iterative development, decomposition, and parallel processing.

Switched on Computing - We are who we are (MS Powerpoint)
In this unit, children plan and create a structured presentation about themselves using Microsoft PowerPoint. With guidance from the teacher in selecting an appropriate topic, e.g. interests and hobbies, children use a web browser to find good images for their presentation and add clear narration to bring their presentation to life.

Year 4

Switched on Computing – We are makers (Programmable device)
Building on their Scratch coding skills, students will begin working with the BBC micro:bit, a pocket-sized computer designed to spark creativity and innovation. The children will explore MakeCode, an online simulation environment that uses a block-based interface similar to Scratch. Through MakeCode, students will learn how to create programs and then transfer them to the physical Micro:bit device using a USB cable. Once uploaded, the Micro:bit can run the program independently, allowing students to see their code come to life.

Switched on Computing – We are Meteorologist (MS Excel)
Computers are powerful tools for storing and processing large volumes of data. This unit integrates data measurement, analysis, and presentation as students take on the roles of meteorologists and weather presenters. They will learn to understand and apply both analogue and digital weather measurement techniques. Students will also develop skills in data logging and use Microsoft Excel to create charts, analyse data, and make informed predictions.

Year 5

Switched on Computing – We are game developers (Scratch Offline)
Using Scratch, students will be introduced to the iterative development technique to design and create their own computer games, applying the knowledge they have gained. They will also learn about the rules of games, which typically involve elements of competitiveness and progression.

Switched on Computing – We are Cryptographers (Scratch Offline)
In this unit, students will explore early methods of long-distance communication and examine two historical cipher systems, Semaphore and Morse code. They will also engage in encrypting and decrypting messages using various cipher techniques, including the Caesar cipher, highlighting the relevance of password security in modern digital contexts.

Year 6

Switched on Computing – We are publishers (MS Publisher)
Students are encouraged to work collaboratively to produce a yearbook or magazine using Microsoft Publisher or Word, integrating images and text from a variety of sources. To introduce additional challenge, students may be invited to take on leadership roles within the project, such as managing group tasks, overseeing proofreading, or coordinating changes to the overall layout and structure of the publication.

Switched on Computing – We are toy makers (Programmable device)
Students will revisit Micro:Bit and MakeCode to explore how Micro:Bit can be used to control a toy. Some students may be challenged to design and develop their own idea for an interactive toy, encouraging creativity and independent problem-solving. Others may benefit from working as a group and with a more scaffolded approach, where they are guided through a recommended project, such as using the Ring:bit Bricks Pack/Car or creating a simple LED or music-based device, to support their learning and build foundational skills.

Access and Inclusion

Each pupil's access to technology varies greatly dependent on the nature of the activity they are involved in. Some activities benefit from access to computers or iPads, while others are enhanced through the use of dedicated programming equipment.

- ICT Suite
- iPads
- Programming devices e.g. Bee-Bot, Micro:Bit (MakeCode Arcade, Ring:bit car, Ring:bit bricks)

There are also other opportunities for learning including:

- After school Coding club
- Half-termly online safety newsletter to Parents and Carers
- Parental online safety events

Switched on Computing resources include adaptations for pupils with SEN/D or EAL, and use free or widely available software like Scratch, iMovie, and Kodu. This ensures all children can participate in cross-curricular activities regardless of background or ability.

Teaching Style

The class teacher is responsible for overseeing each child's Computing education. They are expected to implement a variety of teaching and learning strategies to determine the most appropriate approach for individual learners. For example,
A group or class discussion on online safety

- Individual or paired or group work
- Student led demonstrations
- Allow different levels of achievement and incorporate possibilities for extension work.

In addition to dedicated ICT lessons, children are provided with opportunities to develop and extend their digital skills across other areas of the curriculum. The use of technology, such as iPads, programmable devices, reading pens, is integrated into various subjects to enhance learning, supporting a more cohesive and effective educational experience.

Children are provided with access to appropriate technology to support the development of their individual Computing skills. Our resources and applications are reviewed annually to avoid stereotypes and to promote a balanced, inclusive, and supportive learning environment. Children who have access to technology at home are encouraged to use it to support their learning. Online safety guidance is delivered to pupils as part of their lessons, while parents receive online safety newsletters every half term. These help to promote the safe and responsible use of digital tools both in school and at home.

Monitoring

The ICT Lead is responsible for the regular evaluation of the school's Computing curriculum and oversee the quality of education provided to all students, including:

- Ensuring that the school's curriculum implementation aligns with its intent
- Evaluating the effectiveness of curriculum planning and delivery
- Monitoring student progression and attainment

In addition, the ICT Lead will monitor teaching quality through lesson observations and staff feedback. This process will help identify staff members who require additional training or Continuing Professional Development (CPD) opportunities, in alignment with the school's policy and development plan.

Assessment

Teachers employ formative assessment strategies throughout each unit to inform instruction and make necessary adjustments to planning. As pupils save their work on the school server, teachers are able to access it and conduct summative assessments upon completion of the unit.
In some units, students are given written or multiple-choice assessments to evaluate their learning.
Students are asked or provided with feedback forms to reflect on their learning. These forms help students to assess whether they feel happy with their progress, whether they are on target, and how they performed. Students are also encouraged to reflect on how they can improve moving forward.

Maintenance

There will be a termly check of all ICT suite equipment, including iPads. All staff are asked to report any damaged or unsafe equipment immediately to the ICT Lead or office.

Health and safety

- Cables – Safety tucked away behind the monitor
- Seats – Correct height for knees to fit comfortably under the desk.
- Monitors – Can be moved and tilted to suit the users.
- Keyboards - Users should have the option to have their keyboard flat or tilted and move it to a comfortable position.
- Mice – Option to request a smaller mouse to suit the size of their hands.

All students are reminded how to handle equipment safety and correctly and to switch computers on and off using the correct procedures at the start of each term. All electrical equipment is subjected to Portable Appliance Testing (PAT) at the beginning of each academic year by the Premises Manager and is subsequently monitored on a regular basis throughout the remainder of the year.

Safe Disposal of Equipment

All our electrical equipment, including battery operated ones, are disposed in accordance to the regulations which govern this are the Waste Electrical and Electronic Equipment Regulations (WEEE) 2006 and 2013.

This Policy is subject to regular review.