# Thomas Telford
# Multi Academy Trust

# Computing Policy

## Redhill Primary Academy
## and
## Thomas Telford Primary Free School

**Signed**

**Mr Dara Carroll**
**Interim Chair of Governors**
**January 2026**

**This policy should be read in conjunction with the schools' Online Safety Policy.**

Curriculum Intent

At both Redhill Primary Academy and Thomas Telford Primary Free School, we value the importance of Computing in preparing children for thriving in an ever-developing world where technology is becoming ever more prevalent. Computing is much more than being able to use a computer – it is a subject that enables pupils to use technology to support them in overcoming challenges, creating media and showing an understanding of technology which is around us. We aim to inspire our children to use technology positively, responsibly, and safely. We want our pupils to be creators, not consumers, and our broad curriculum encompassing computer science, information technology and digital literacy reflects this. The content we have selected has been carefully planned to ensure that children have ample opportunity to revisit existing knowledge and build new knowledge alongside this. We also want our pupils to understand that there is always a choice when using technology and as a school we utilise technology, including social media, to model positive use. Our knowledge-rich curriculum is balanced with the opportunity for pupils to apply their knowledge creatively which will in turn help our pupils become digitally literate and skilful computer scientists. Computing knowledge and skills are embedded across the curriculum to make learning creative and accessible. It is intended that when children leave our schools, they will be able to use computational thinking as a tool to help them overcome challenges.

Curriculum Implementation

The teaching and implementation of the Computing Curriculum is based on the National Curriculum, ensuring a well-structured approach to the subject which covers the three areas of Computing: computer science, information technology and digital literacy.

With support from external advisers, the computing leader has chosen three units of work for each year group from the Teach Computing scheme of work. We teach a range of units each year which are carefully planned to not only deliver engaging curriculum content which is relevant to our children, but also to build upon key knowledge that the children have been taught in previous year groups, starting in the EYFS.

Online safety is taught through Computing and PHSCE every term using the Project Evolve resources. Through this scheme of work, we cover all of the strands set out through the Education for a Connected World Framework.

Over the page, there is an outline of our curriculum offer in Computing from EYFS to Year 6.

| | Autumn | Spring | Summer |
|---|---|---|---|
| **Nursery** | **Acceptable Use Policy (AUP) lesson—online safety rules**<br>Programmable toys<br>Age-appropriate games using technology<br>Recording devices | | |
| **Reception** | **Acceptable Use Policy (AUP) lesson— online safety rules**<br>Programming A – Moving a robot | Creating media – Digital painting | |
| **Year 1** | **Acceptable Use Policy (AUP) lesson— online safety rules**<br>Computing systems and networks – Technology around us | Creating media – Digital writing | Programming B – Introduction to animation |
| **Year 2** | **Acceptable Use Policy (AUP) lesson— online safety rules**<br>Computing systems and networks – IT around us | Programming A – Robot algorithms<br><br>Creating media – Making music<br>**cross-curricular link** | Programming B – An introduction to quizzes |
| **Year 3** | **Acceptable Use Policy (AUP) lesson— online safety rules**<br>Computing systems and networks – Connecting computers | Creating media – Animation<br>**History cross-curricular link: Stone Age to Iron Age** | Programming A – Sequence in music<br>**cross-curricular link** |
| **Year 4** | **Acceptable Use Policy (AUP) lesson— online safety rules**<br>Computing systems and networks – The Internet | Creating media – Audio editing | Programming A – Repetition in shapes<br>**Maths cross-curricular link: 2D shape** |
| **Year 5** | **Acceptable Use Policy (AUP) lesson— online safety rules**<br>Computing systems and networks – Systems and Searching | Creating media – Vector drawing | Programming A – Selection in physical computing<br>**Science cross-curricular link: Electricity** |
| **Year 6** | **Acceptable Use Policy (AUP) lesson— online safety rules**<br>Computing systems and networks – Communication and Collaboration | Programming A – Variables in games | Programming B – Sensing |

Curriculum Impact

We measure the impact of our curriculum through the following methods:

- Observing the children completing activities
- Interviewing the pupils about their learning (pupil voice interviews)
- Moderation staff meetings where pupil's work is scrutinised and there is opportunity for dialogue between teachers
- Learning walks

We also use retrieval strategies and self and peer assessment as assessment for learning strategies in order to measure the impact of our carefully spaced curriculum offer. Through our assessments and monitoring, we can see the impact of children knowing and remembering more.

The Computing subject leader will continually monitor the impact Computing teaching is having on the children's learning, through work scrutinies and pupil voice interviews, to ensure that the progress of knowledge and skills is being taught. They will also ensure the knowledge taught is retained by the children and continually revisited and that the learners are able to apply the skills they have been taught to a variety of different settings, showing independence with their learning. Impact will also be measured through key questioning skills built into lessons, learning objectives and success criteria and summative assessments aimed at targeting next steps in learning.

Values and Attitudes

Our children should uphold the 'A Valued Me' system throughout all computing sessions and when using technology across the curriculum:

- Respect- use technology safely and respectfully to achieve specific goals.
- Friendship- work with others, listening to their ideas and expertise and treating these with respect e.g. cooperating and collaborating when using a computer or digital device as part of a group to ensure that all contribute.
- Responsibility- be responsible for and aware of the security of their own and other people's information in electronic form e.g. recognise that they should ask before reading or copying from other's work.
- Empathy- demonstrate understanding of how my online behaviour will affect others and supporting those who may experience unkind online behaviour online.
- Honesty- acknowledge the ownership of ideas and recognise the value of information held on IT systems e.g. recognising how much work has gone into producing a computer file, and how easily careless access can destroy it.
- Independence- using the key concepts and approaches of tinkering, creating, persevering, debugging and collaborating to develop computational thinking and achieve specific goals.

Computer Science

Computer science is the core of our computing curriculum. Children are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.

Our children should acquire and develop the skills associated with computer science in order 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 algorithms work and 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.

Information Technology

Children are equipped to use information technology to create programs, systems and a range of content. We give children multiple opportunities to develop their confidence and competence in using a range of programs through revisiting the knowledge and skills taught in computing throughout the wider curriculum.

Our children should acquire and develop skills associated with Information technology in order to…

- use search technologies effectively.
- select, use and combine a variety of software 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.
- acquire and refine the techniques e.g. saving, copying, and checking the accuracy of input and output needed to use ICT.
- develop the skills of collecting first hand data, analysing and evaluating it, making inferences or predictions and testing them, drawing and presenting conclusions, and use all these in their work with ICT.

Digital Literacy

The computing curriculum ensures that children become digitally literate.

Our children should acquire and develop their skills in digital literacy in order to…

- understand the opportunities networks offer for communication and collaboration.
- be discerning in evaluating and presenting data and information.
- be able to use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Software and hardware

In choosing software, there has been a strong emphasis on software which can be used across multiple curricular areas so that children can become efficient computer users as quickly as possible.

Below is a list of the software and hardware that children will encounter through their computing education:

Year 1

- **Microsoft Paint** (a simple paint program for creating and editing drawings and other images)
- **Microsoft Word** (word processing program)
- **ScratchJr** (introductory programming language for ages 5-7)

Year 2

- **Microsoft PowerPoint** (to practise resizing images, dragging and dropping objects)
- **Microsoft Paint**
- **Camera** and **Voice Memos** (iPad)
- **Beebots** (floor robots)
- **ScratchJr**
- **Chrome Music Lab** (within Music lessons)
- *Wider curriculum outcome: diary entry in literacy using MS Word*

Year 3

- **Microsoft Paint**
- **iMotion** (iPad app that allows the user to make stop-frame animations)
- **Scratch** (programming language for ages 8+)
- *Wider curriculum outcome: report about the Industrial Revolution in history using MS Word*

Year 4

- **Google Chrome/Microsoft Edge/Safari** (browsers for exploring websites and webpages)
- **Chrome Music Lab** (website for learning music)
- **Audacity** (audio editing and recording app)
- **FMSLogo** (simple programming language using a turtle)
- *Wider curriculum outcome: persuasive writing (recycle, reduce, reuse) in literacy using MS Word*
- *Wider curriculum outcome: presentation about the journey of a river in geography using MS PowerPoint*

Year 5

- **Google Chrome/Microsoft Edge/Safari** (browsers for exploring search engines)
- **Microsoft PowerPoint** (to create drawings, shapes and diagrams)
- **Crumble** (microcontroller – programmable device)
- **Crumble software** (block-based programming language)
- *Wider curriculum outcome: presentation about Lily Cartwright in history using MS PowerPoint*
- *Wider curriculum outcome: writing about the Anglo-Saxons in history using MS Word*

Year 6

- **Microsoft Teams** (to access shared documents)
- **Microsoft PowerPoint** (to work collaboratively on a project)
- **Scratch**
- **Micro:bit** (input, process, output device that is programmable)
- **Microsoft MakeCode** (block/text-based editor for programming Micro:bit devices)
- *Wider curriculum outcome: Greek menu in D&T using MS PowerPoint*
- *Wider curriculum outcome: collaborative presentation about the Ancient Greek Olympics using MS PowerPoint*

Children are also provided with varied opportunities to work with a range of technology, including but not limited to the following:

- Digital cameras
- Digital video recorders
- Microphones
- Digital microscopes
- Control technology equipment
- Data logging equipment
- Recordable devices
- Clicker

Specific technology resources may be needed for individuals with specific learning needs, and these will be purchased through the SEND budget.

## Roles and responsibilities

### The Role of Senior Management

The overall responsibility for the use of Computing rests with the senior leadership and management of a school. The Head Teachers and Governors, in consultation with the Computing subject leaders and staff have the following responsibilities:

- Determine the ways Computing should support, enrich and extend the curriculum.
- Decide the provision and allocation of resources.
- Decide ways in which developments can be assessed, and records maintained.
- Ensure that Computing is used in a way to achieve the aims and objectives of the Academy / Free School.
- Ensure that there is a Computing policy.
- Identify a Computing subject leader.

### The Role of the Computing subject leader

The subject leader has the following responsibilities:

- Ensure the development of a scheme of work for the Computing curriculum. This will develop the pre-requisites for the use of Computing across the curriculum.
- Promote the integration of Computing within teaching and learning activities across different subject areas, develop and monitor the contribution of different subjects to its cross-curricular use.
- Manage the provision and deployment of resources and give guidance on classroom organisation support.

- Encourage colleagues and support them in the teaching, planning and resourcing of computing.
- Act as a contact point between the school and support agencies.
- Provide limited technical expertise, drawing on the support of the ICT Technician employed by the school.
- Co-ordinate the evaluation and review of the schools' Computing policy.

The Role of subject leaders

There is a clear distinction between teaching about Computing and teaching with Computing. Subject leaders plan where Computing should be used in their subject schemes of work. This is done in conjunction with the Computing subject leader.

The Role of Class Teachers

Even though whole-school leadership and support is essential to the development of Computing capability, it remains the responsibility of each teacher to plan appropriate Computing activities and assist the subject leader in the monitoring and recording of pupil progress in Computing.

Infrastructure

Providing an exemplary computing education is dependent on having in place a secure, reliable, and available infrastructure across the school that is fit for purpose in line with the Computing intent and implementation. The infrastructure at Redhill and Thomas Telford Primary is comprised of the following elements:

- Leased Line Broadband, secure with Fire wall & Endpoint Anti-Virus with content-filtering.
- Whole school Ethernet networks (curriculum and Guest VLAN).
- Curriculum digital content cache server.
- Whole school wireless network.
- Cloud based Email Services.
- Cloud based file storage for all Staff users.
- Mobile device management by Intune.
- Interactive touchscreens in each classroom.
- Projector, screen and sound system in hall with attached curriculum device.
- Sufficient laptops and computers available for pupil learning.
- Maintenance and technical support contracts to achieve reliability and availability.