

Riversdale Primary School

"A nurturing, ambitious and values led school."

Computing Policy

Date: 15th September 2025

Review Date: 14th September 2028



Article 28: You have the right to education.

Article 29:

You have the right to education which develops your personality, respect for other's rights and the environment.

LEGAL FRAMEWORK

This policy has due regard to all relevant legislation and statutory guidance, including but not limited to:

- DfE (2013) National curriculum in England: computing programmes of study
- DfE (2017) Statutory framework for the early years foundation stage
- DfE (2024) Keeping Children Safe in Education (KCSIE)
- UKCIS (2020) Education for a Connected World
- Data Protection Act 2018 / GDPR

INTENT

At Riversdale Primary School, our computing curriculum aims to equip all students with the knowledge, skills, and understanding they need to thrive in an increasingly digital world. Our goal is to foster a love for learning about technology while ensuring students develop the confidence and competence to use it responsibly and safely.

We aim to provide an ambitious and inclusive curriculum that inspires curiosity, creativity, and critical thinking. By exploring the core areas of computer science, digital literacy, and information technology, we encourage students to think computationally, collaborate effectively, and adapt to a rapidly evolving technological landscape.

Our intent is to prepare every learner, including those with SEND, to succeed in their next stage of education and beyond. As such, by promoting digital resilience, innovation, and ethical awareness, we aim to empower all students to navigate the digital world with integrity and confidence.

IMPLEMENTATION

Computing is taught fortnightly, alternating with Design and Technology, to ensure a balanced curriculum that allows pupils to develop both creative and technical skills. This structure provides sufficient time for deep, practical learning experiences in each subject while maintaining consistent exposure across the term.

Teaching follows the **Kapow Primary Computing scheme**, adapted and condensed to meet the needs of our pupils and local community, ensuring breadth, balance, and progression. Lessons are discrete but may include cross-curricular links where these are genuine and enhance learning.

Teachers use modelling, guided practice, and independent practice, ensuring all pupils can access and master computing knowledge and skills. The Kapow Primary scheme follows a spiral curriculum, where key concepts are revisited and built upon each year to develop depth and mastery over time. Each unit is structured around clear learning objectives, with opportunities for scaffolding and challenge to support all learners. Retrieval practice and recap activities are embedded into lessons to strengthen long-term memory and help pupils make connections across units.

CURRICULUM PROGRESSION

The curriculum follows Kapow's sequenced programme across the five disciplinary strands:

- Computing Systems & Networks
- Programming
- Online Safety
- Data Handling

Creating Media

Pupils build on prior knowledge and skills each year, revisiting key concepts with increasing depth. This spiral curriculum ensures pupils develop strong schemata and independence.

DISCIPLINARY CONCEPTS

Computing Systems & Networks:

In EYFS and KS1, pupils explore technology in their immediate environment and begin to understand basic hardware components such as keyboards and mice. As they move into KS2, they develop a deeper understanding of how computer systems work together through networks, the internet, and search engines. By Year 6, pupils explore concepts such as cloud computing, data transmission, and the ethical implications of artificial intelligence.

Programming:

In EYFS, children learn to follow and give simple instructions, developing early algorithmic thinking. In KS1, they progress to using Bee Bots and other programmable toys to create simple sequences. In KS2, pupils move on to using Scratch to design, test, and debug programs, culminating in more complex projects using Python and music programming in Year 6.

Online Safety:

Introduced in EYFS through discussions on kindness and using technology safely. In KS1, pupils learn about keeping personal information private and identifying trusted adults. In KS2, they build on this foundation by learning about digital footprints, online privacy, respectful communication, and recognising misinformation, preparing them to be responsible digital citizens.

Data Handling:

EYFS pupils begin by sorting and grouping everyday objects. In KS1, this develops into creating simple pictograms and bar charts. In KS2, pupils collect, present, and interpret larger sets of data using spreadsheets and databases, leading to basic data analysis and understanding of 'big data' in Year 6.

Creating Media:

EYFS children explore drawing and mark-making using digital tools. In KS1, they use tablets to take photos and record sound. In KS2, pupils develop digital literacy through creating and editing images, video, and audio, with Year 6 pupils producing multimedia projects combining text, sound, and animation for specific audiences.

TEACHING AND CURRICULUM STRUCTURE

Teaching in Computing follows Rosenshine's Principles of Instruction, ensuring learning is well-sequenced, scaffolded, and revisited over time. Lessons incorporate retrieval practice, modelling, guided practice, and independent application to support the development of both substantive and disciplinary knowledge.

Each unit begins with a Knowledge Organiser, outlining key vocabulary, prior knowledge, and core concepts for pupils. Teachers are also supported with Teacher Knowledge Organisers, which provide substantive knowledge, disciplinary skills, and retrieval questions to guide effective lesson delivery and assessment.

<u>ASSESSMENT</u>

Assessment is integral to the Computing curriculum.

- Formative assessment: questioning, observation, retrieval tasks, and peer discussion.
- **Summative assessment**: end-of-unit outcomes, knowledge organiser checks, and Kapow's assessment framework.
- Teachers report pupil progress in Computing to parents in end-of-year reports and consultation evenings.
- Pupils are encouraged to self-assess and reflect on their digital learning.

INCLUSION

The Computing curriculum is inclusive and ambitious for all learners, including those with SEND, EAL, disadvantaged pupils, and high prior attainers. Lessons are designed to ensure equity of access and appropriate challenge so that every pupil can succeed and progress from their individual starting point.

Strategies include:

- Use of accessibility tools (e.g., screen readers, voice input, enlarged text).
- Adaptive hardware and software to remove barriers to participation.
- Differentiated tasks and scaffolds within Kapow's scheme to meet diverse learning needs.
- Extension and enrichment opportunities for confident and high prior-attaining pupils, such as open-ended coding challenges and independent project work.
- Collaborative planning with the SENCo to ensure provision and reasonable adjustments for pupils with additional needs.

ONLINE SAFETY

Online Safety is taught explicitly in **Autumn 1** in every year group, following Kapow and *Education for a Connected World*. It is reinforced throughout the year via:

- Retrieval and recap in Computing lessons.
- Integration into RSHE and safeguarding teaching.
- Parent workshops and guidance.

All teaching aligns with **KCSIE** and school policies, including but not limited to:

- Safeguarding Policy,
- Online Safety Policy.

DIGITAL CITIZENSHIP

Riversdale runs a strong Digital Citizenship programme. Each class has representatives who:

- Meet weekly to discuss online safety, online gaming, new technologies, and digital wellbeing.
- Cascade discussions back to their classes to embed awareness across the school.
- Lead assemblies and school-wide events to promote responsible technology use.
- Act as role models, keeping online safety visible and relevant all year.

HEALTH AND SAFETY

Pupils are taught to:

- Use devices responsibly and safely.
- Manage screen time and posture to avoid health risks.
- Protect personal data and respect GDPR principles.
- Report technical issues and safeguarding concerns.

Equipment is securely stored and maintained by staff, with regular audits of resources.

IMPACT

Impact is measured through:

- Ongoing assessment against progression documentation.
- Pupil voice and feedback from Digital Citizenship reps.
- Reports to parents and governors.
- Evidence of knowledge retention through retrieval.

Digital Leadership outcomes are a distinctive feature: pupils take responsibility for promoting online safety, demonstrate leadership through assemblies, and influence whole-school practice.

ROLES AND RESPONSIBILITIES

Governors

- Ensuring a broad and balanced computing curriculum is implemented in the school.
- Ensuring the school's computing curriculum is accessible to all pupils.

Headteacher/Deputy Headteacher (Quality of Education)

- The overall implementation of this policy.
- Ensuring the school's computing curriculum is implemented consistently.
- Ensuring appropriate resources are allocated to the computing curriculum.
- Ensuring all pupils are appropriately supported.
- Appointing a member of staff to lead on the school's approach to teaching computing.

Subject Leader

- Preparing policy documents, curriculum plans and schemes of work for computing.
- Reviewing changes to the national curriculum and advising on their implementation.
- Monitoring the learning and teaching of computing, providing support for staff where necessary.
- Organising the sourcing of and deployment of resources and carrying out an annual audit of all computing resources.
- Advising on the contribution of computing to other curriculum areas.
- Keeping up to date with developments in computing education, passing this on to other members of staff.
 This could include leading staff meetings and providing staff members with the appropriate training, working alongside colleagues etc...
- Monitoring and evaluating progress in computing and liaising with senior leadership on any action necessary.
- Liaising with appropriate bodies e.g. other primary schools and secondary schools, governors, the LA etc. concerning matters relating to computing.

Teacher

- Acting in accordance with this policy.
- Liaising with the computing lead about key topics, resources and supporting individual pupils.
- Ensuring that all relevant statutory content is covered within the school year.
- Monitoring the progress of pupils in their class and reporting this on an annual basis to parents.
- Reporting any concerns regarding the teaching of the subject to the computing lead or a member of the SLT.
- Undertaking any training that is necessary to teach the subject effectively.

Digital Citizenship Reps

- Promote safe and responsible use of technology.
- Represent pupil voice in weekly meetings.
- Lead initiatives across the school.

MONITORING & REVIEW

This policy is monitored and reviewed by the Computing Subject Leader.

It will be reviewed at least every three years, or sooner if required by statutory updates.