



SPARKEN HILL
ACADEMY

ICT and Computing Policy

2026-27 | Version 1.1

Document Control

Version	Date	Prepared by	Reviewed / approved by	Next review	Comments
1.0	02-02-26	RTL	F&P	February 2027	Updated to include mis / disinformation and AI elements
1.1	Oct 2026	Mr R.Lilley	F&P	Oct 2027	Adoption of the NCCE Teach Computing Curriculum (matched to the 2026-27 consolidated LTPs); KCSIE 2026; DfE generative AI product safety standards; house style; corrections

Policy owner	Computing Lead Mrs Leverton, with the Principal (DSL) for online safety, filtering and monitoring
Approved by	Trust Board
Review cycle	Annually, or sooner if statutory guidance changes or the revised National Curriculum is published (expected spring 2027)
Curriculum	National Centre for Computing Education (NCCE) <i>Teach Computing Curriculum</i> , Years 1-6, adopted for 2026-27, planned through the phase consolidated long-term plans and medium-term plans
Statutory basis	National Curriculum in England: Computing programmes of study (KS1 and KS2); EYFS Statutory Framework; Keeping Children Safe in Education 2026; DfE Filtering and Monitoring Standards; DfE Cyber Security Standards for Schools and Colleges; UK GDPR, Data Protection Act 2018 and Data (Use and Access) Act 2025
Related policies	Online Safety Policy (v1.4); Use of Artificial Intelligence Policy; Child Protection Policy 2026-27; Staff Code of Conduct (v1.9); Data Protection Policy; Teaching and Learning Policy; SEND Policy; PSHE / RSHE Policy; Relationships and Behaviour Regulation Policy

Summary of Changes in this Version

Section	Change made	Reason / source
1. Intent	Adoption of the NCCE Teach Computing Curriculum stated. Otherwise unchanged in substance.	Curriculum adopted for 2026-27
2. National context (new)	New section on the Curriculum and Assessment Review: current programmes of study remain statutory until the revised National Curriculum (published 2027, first teaching September 2028).	Government response to the Curriculum and Assessment Review
3. Implementation	Rewritten around the NCCE curriculum. The previous weekly model (explicit Computer Science lesson, Tinkering session or D.A.R.E.S. project) and the three-strand IT / Computer Science / Digital Literacy table are replaced by the NCCE unit structure. New table of all 36 units by year group and half term, matching the 2026-27 consolidated LTPs for KS1, LKS2 and UKS2. NCCE pedagogy principles added. EYFS foundations added.	Consolidated LTPs (EVEN 2026-27, NC-linked) and MTPs in the Google planning drive
5. Organisation for Learning	Hardware needed by NCCE units added (Bee-Bots, micro:bits, physical computing kits, laptops or desktops for Scratch and micro:bit). Filtering and monitoring paragraph rewritten: Smoothwall Monitor alerts RAG-rated to the Principal / DSL; CPOMS; annual review; named Trustee. "Y34" corrected. Pupil mobile phone arrangement added.	NCCE unit guides; KCSIE 2026; Child Protection Policy 2026-27
6. Planning	Computing sits outside the two-year topic cycle: each year group teaches its own six NCCE units every year. Phase MTPs teach the two year groups side by side in the house six-lesson format. Typo "Intelligence" corrected.	LTPs and MTPs 2026-27
7. Assessment	NCCE unit assessment rubrics added alongside the Knowledge and Assessment Grids.	NCCE assessment materials
8. Professional Development	NCCE training added. KCSIE 2025 updated to KCSIE 2026.	KCSIE 2026
10. Artificial Intelligence	Tool approval checked against the DfE Generative AI Product Safety Standards (updated 19 January 2026). Links to Staff Code of Conduct v1.9.	DfE product safety standards, January 2026
13. Online Safety	New paragraph on where online safety is taught, because the NCCE curriculum does not cover all of <i>Education for a Connected World</i> . The eight digital literacy strands moved here. UKCCIS corrected to UKCIS; KCSIE updated to 2026.	NCCE teacher guides; UKCIS
14-15	Typo corrected ("consent is given"); Data (Use and Access) Act 2025 added.	Accuracy; DUAA 2025

1. Intent

At Sparken Hill Academy we want pupils to be masters of technology and not slaves to it. Technology is everywhere and will play a pivotal part in pupils' lives. We therefore model and teach how to use technology positively, responsibly and safely.

We want our pupils to be creators, not consumers. From 2026–27 our curriculum for Years 1 to 6 is the National Centre for Computing Education (NCCE) **Teach Computing Curriculum**, a complete, sequenced programme that covers computer science, information technology and digital literacy and is mapped to every statement of the National Curriculum. Computing education must also address the opportunities and risks of artificial intelligence (AI) and emerging technologies. We want pupils to understand that there is always a choice in how they use technology, and as a school we use technology, especially social media, to model positive use. We recognise that the best prevention for many of the issues we see with technology and social media is education.

Technology allows pupils to share their learning in creative ways and opens up accessibility opportunities, including the potential for AI tools to support adaptation and personalisation of learning for pupils with SEND and other additional needs. Our knowledge-rich curriculum is balanced with opportunities for pupils to apply their knowledge creatively, which in turn helps them become skilful computer scientists.

We encourage staff to apply computing across the whole curriculum to make learning creative and accessible. We want pupils to be fluent with a range of tools, so that by Upper Key Stage 2 they have the independence and confidence to choose the best tool for the task. Pupils are taught to use technology critically and creatively, including understanding when AI and other tools are appropriate and when human thinking is essential.

2. National Context

Curriculum and Assessment Review

The final report of the Curriculum and Assessment Review was published on 5 November 2025, together with the government's response. A revised National Curriculum is due to be published in spring 2027 for first teaching from September 2028. Until then the current Computing programmes of study remain statutory and this policy is written against them.

The Review gives particular prominence to digital literacy and AI within computing. The NCCE curriculum, which is maintained and updated by the NCCE, together with our online safety and AI teaching, places the school in a good position; the Computing Lead will audit the curriculum against the revised programmes of study as soon as they are published, and this policy will be reviewed at that point.

3. Implementation

3.1 The Teach Computing Curriculum

The Teach Computing Curriculum is written by subject experts for the NCCE and is free to all schools in England. It is built as a spiral curriculum: key concepts are revisited in every year group with increasing depth, so that pupils build on secure prior knowledge. Each year group studies **six units, one per half term**, drawn from four strands (two Creating media units and two Programming units each year):

Strand	What pupils learn
Computing systems and networks	What computers are, how their parts work together, and how networks and the internet connect them and let us search, communicate and collaborate.
Creating media (two units a year)	Using software to create and improve digital content: painting, writing, photography, music, animation, audio, video, desktop publishing, photo editing, web pages, vector graphics and 3D models.
Programming A and Programming B	Algorithms, then sequence, repetition, selection and variables, moving from floor robots and block-based languages (ScratchJr, Scratch) to a text-based language and physical devices.
Data and information	Collecting, organising, analysing and presenting data, from grouping objects and pictograms to databases, data logging and spreadsheets.

3.2 Units by year group

The table below sets out the units taught in each year group. It matches the Computing row of the 2026–27 consolidated long-term plan for each phase. Because the NCCE curriculum is sequenced by year group, the same units are taught every year and do not change between the odd and even topic cycles.

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Strand	Computing systems and networks	Creating media	Programming A	Data and information	Creating media	Programming B
Y1	Technology around us	Digital painting	Moving a robot	Grouping data	Digital writing	Programming animations
Y2	IT around us	Digital photography	Robot algorithms	Pictograms	Making music	An introduction to quizzes
Y3	Connecting computers	Stop-frame animation	Sequencing sounds	Branching databases	Desktop publishing	Events and actions in programs
Y4	The internet	Audio production	Repetition in shapes	Data logging	Photo editing	Repetition in games
Y5	Systems and searching	Video production	Selection in physical computing	Flat-file databases	Introduction to vector graphics	Selection in quizzes
Y6	Communication and collaboration	Webpage creation	Variables in games	Introduction to spreadsheets	Sensing movement	3D modelling

In Upper Key Stage 2 the two Summer units are paired as the LTP shows: Summer 1 teaches Year 5 vector graphics alongside Year 6 sensing movement, and Summer 2 teaches Year 5 selection in quizzes alongside Year 6 3D modelling. In Year 6 the Summer 2 "Creating media" unit therefore follows the "Programming B" unit, and every unit still comes after the programming unit it depends on (Variables in games before Sensing movement; Selection in physical computing before Selection in quizzes).

3.3 How computing is taught

Computing is taught as a discrete, timetabled lesson every week, following the six-lesson sequence of each unit. Teachers follow the NCCE pedagogy, which is built on twelve research-informed principles: lead with concepts; structure lessons; make concrete; unplug, unpack, repack; model everything; foster program comprehension; create projects; add variety; challenge misconceptions; work together; get hands-on; and read and explore code first.

Programming lessons use the PRIMM approach (Predict, Run, Investigate, Modify, Make), so pupils read and explain code before writing their own.

Where a unit connects naturally to the phase topic, the MTP uses the topic as the context: for example, Year 5 vector drawings of Ancient Egyptian motifs for Tomb Raiders. Pupils also apply their computing knowledge in other subjects, such as computer-aided design in Tinkercad for the Year 5/6 DT flood barrier, data logging in science and digital mapping in geography.

3.4 Early Years Foundation Stage

The NCCE curriculum begins in Year 1. In Nursery and Reception, pupils build the foundations through Understanding the World, Expressive Arts and Design and Communication and Language: exploring everyday technology, using simple programmable toys such as Bee-Bots, giving and following precise instructions, sequencing, and taking and looking at photographs. Unplugged activities develop the early computational thinking that the Year 1 units build on.

4. Impact

We encourage pupils to enjoy and value the curriculum we deliver, constantly asking the WHY behind their learning and not just the HOW. We want learners to discuss, reflect on and appreciate the impact computing has on their learning, development and wellbeing. Pupils learn to evaluate digital content critically, recognising misinformation, disinformation and the limitations of AI-generated content.

Finding the right balance with technology is key to an effective education and a healthy lifestyle. The way we teach computing helps pupils recognise the need for that balance, which they can continue to build on in the next stage of their education and beyond. Through the computing curriculum pupils develop digital resilience and an understanding of the ethical implications of technology use.

The way pupils showcase, share, celebrate and publish their work best shows the impact of our curriculum. Leaders also review pupils' knowledge and skills through Google Drive and Google Classroom, observe learning regularly, and use the unit end-point statements in the Knowledge and Assessment Grids (section 7). Progress is demonstrated through outcomes and through the record of coverage in achieving them.

5. Organisation for Learning

5.1 Devices and resources

All pupils from the Foundation Stage upwards have daily access to computers, Chromebooks or iPads. Key Stage 2 pupils have an individual iPad in their classroom, used in lessons as needed; these support learning in all subjects as well as developing ICT capability. Each classroom has an interactive whiteboard and a visualiser. Pupils and staff have Google for Education accounts and use Google Drive and Google Classroom to complete and submit work.

Several NCCE units need specific hardware and software, which the Computing Lead audits before each unit:

- **Laptops or desktops with a mouse** for Scratch, Logo, Google Drawings and micro:bit programming. Some units, including micro:bit flashing, are not supported on tablets.
- **Bee-Bots** or similar floor robots for Year 1 *Moving a robot* and Year 2 *Robot algorithms*; **ScratchJr** for Year 1 *Programming animations*.
- **micro:bits** with USB leads, battery packs and spare AAA batteries for Year 6 *Sensing movement*; **physical computing kits** for Year 5 *Selection in physical computing*.
- **Data loggers** for Year 4 *Data logging*, and cameras or tablets for photography, animation and video units.

- Other equipment available includes sound recorders, talking books, Lego Technic, and animation and film-making software.

5.2 Filtering and monitoring

All technology use is governed by filtering and monitoring that meets the DfE Filtering and Monitoring Standards, including measures to address generative AI risks and the AI features now built into search engines and office software. Our system is **Smoothwall** (filtering and Smoothwall Monitor), supported by our IT provider, JasminelT.

- Filtering blocks harmful and inappropriate content so that pupils cannot access it, and reports blocked attempts to staff.
- Monitoring alerts are RAG-rated and sent to the Principal as DSL. Staff use professional judgement about next steps: for example, synonyms for "dark" are legitimately used in some Year 3 and Year 4 units but often trigger a report.
- The service includes human moderation, so that the most urgent risks (for example indicators of suicidal ideation) are escalated to the DSL immediately.
- Safeguarding concerns arising from filtering or monitoring are recorded on CPOMS and handled under the Child Protection Policy.
- The DSL, the IT provider and the Trustee with responsibility for filtering and monitoring review provision at least annually using the DfE self-assessment, and whenever a new risk, device or AI tool is introduced. Mrs C Middleton / Mrs L Bunn are the Safeguarding Governors who have overview of the filtering and monitoring reporting.

Pupils who bring a mobile phone to school hand it to their class teacher at the start of the day and collect it at the end. Pupils do not use personal devices in school.

6. Planning

Computing is planned in three layers, which are designed to match each other exactly:

- **Long-term:** the consolidated long-term plan for each phase (KS1, LKS2, UKS2) shows the NCCE unit for each year group in each half term, with the National Curriculum reference and an end-point statement for each year group. The table in section 3.2 matches these plans.
- **Medium-term:** each half term has a phase medium-term plan in the house six-lesson format, in which the two year groups are taught side by side from their own NCCE unit. Lessons 1–5 each carry one "known and remembered" statement per year group; lesson 6 is a Golden Thread and assessment lesson. The MTPs are built from the NCCE lesson plans, slides and activities, which staff use in lessons.
- **Short-term:** teachers adapt NCCE lessons using ongoing assessment so that every pupil can access the learning and be challenged.

Computing sits outside the two-year topic cycle. Because each year group studies its own units every year, the computing row is the same in the odd and even consolidated LTPs. Superseded computing plans in the half-term folders are to be marked as withdrawn so that staff do not plan from them.

The Computing Lead offers advice and training on new equipment and technologies and supports their introduction into classrooms. Staff may use approved AI tools for lesson planning and resource creation, always checking outputs for accuracy, appropriateness and alignment with our curriculum (see the Use of Artificial Intelligence Policy).

7. Assessment, Attainment and Progress

Teachers assess pupils continuously during lessons, using the NCCE formative assessment built into each lesson (for example, questions, quizzes and exit tasks) to adapt teaching. At the end of each unit:

- pupils' work is assessed against the **NCCE unit assessment rubric**, and in Key Stage 2 the NCCE summative assessment where one is provided;
- teachers record each pupil against the five end-point statements in the phase **Knowledge and Assessment Grid**. Every pupil is recorded as 2 (secure) by default, and teachers change this to 1 (working towards) or 3 (greater depth) where appropriate;
- pupils' finished work (programs, files and exports) is saved to Google Drive or Classroom as evidence.

The Computing Lead uses the coordinator overview to identify statements that need revisiting, and the NCCE learning graphs to see where later units depend on earlier learning. With rapid advances in technology, teachers keep their own capability up to date, including an understanding of emerging technologies such as AI and their implications for teaching and learning.

8. Professional Development

The Computing Lead provides opportunities for staff to develop their subject knowledge through INSET, in-house training, peer coaching and NCCE courses, which are available online and through local Computing Hubs. Staff new to a unit read the NCCE unit guide and teacher guide before teaching it. New equipment and software are introduced through staff meetings and INSET.

All staff receive regular online safety training, including recognising and responding to AI-related risks such as deepfakes and AI-assisted bullying, in line with **Keeping Children Safe in Education 2026**.

9. Development of ICT within the School

The Computing Lead and the Trust Board ensure that ICT facilities are maintained and developed. The Computing Lead produces an annual action plan so that technology keeps pace with the needs of pupils. The school maintains robust cyber security in line with the DfE Cyber Security Standards for Schools and Colleges, including tested backups, multi-factor authentication for administrator accounts, secure Wi-Fi configuration, regular patching and annual cyber awareness training for staff.

10. Artificial Intelligence (AI)

The school recognises both the opportunities and risks of generative AI in education. Our approach follows the DfE policy paper *Generative artificial intelligence (AI) in education* and the DfE **Generative AI Product Safety Standards** (updated 19 January 2026), and prioritises pupil safety, data protection and educational integrity. Full detail is in the Use of Artificial Intelligence Policy and the generative AI section of the Staff Code of Conduct.

10.1 Approving AI tools

- No AI tool is used with or by pupils until the Principal (DSL) and Computing Lead have checked it against the DfE Product Safety Standards. This includes filtering of harmful content, data protection, age-appropriateness, protection against manipulation, and support for pupils' cognitive, emotional and social development.
- Any tool that pupils can converse with must be able to detect signs of distress and direct pupils to human support, including raising a flag to the DSL.
- Tools must comply with the age restrictions in their terms of service. A data protection impact assessment is completed where personal data could be processed.

10.2 Staff use of AI

- Staff may use approved, enterprise-grade AI tools to support lesson planning, resource creation, report writing and administrative tasks, provided they critically evaluate all outputs for accuracy, bias and appropriateness before use.
- Personal data about pupils must not be entered into AI tools without explicit agreement and data protection compliance.
- Staff must verify that AI-generated content is factually accurate and appropriate for the intended pupil audience.
- AI must not be used for high-stakes summative assessment or formal reporting without human review and verification.

10.3 Pupil use of AI

- Pupils are taught about AI, including how AI works, its benefits and limitations, and ethical considerations.
- If AI tools are made available to pupils, they must be approved (10.1), age-appropriate, monitored and used only under teacher supervision with clear learning objectives.
- Pupils are taught when AI use is appropriate and when independent thinking and original work are required. Assessment arrangements make clear when AI use is permitted.

10.4 Safeguarding and AI

- Filtering and monitoring address AI-related risks in line with the DfE Filtering and Monitoring Standards.
- Staff are trained to recognise AI-generated content that may be inappropriate, harmful or misleading. AI-generated harms such as deepfake images and AI-assisted bullying are dealt with under the Child Protection Policy and the Relationships and Behaviour Regulation Policy.
- The school risk-assesses AI tool use as part of its annual online safety review.

11. Equal Opportunities and Inclusion

In delivering the computing curriculum, teachers respect individual needs, including those of pupils with SEND, pupils learning English as an additional language and those with particular talents. We recognise that technology, including AI, can perpetuate bias and inequality if not carefully monitored, so staff critically evaluate digital resources and tools for bias and ensure equitable access to technology for all pupils.

Pupils are timetabled for ICT use to ensure equal access, and computer time is not used as a reward. Software is checked for bias related to protected characteristics. Pupils with SEND extend their ICT capability through appropriate software, accessibility features and additional adult support, and ICT is also used to extend and challenge the more able. Because many of our pupils have limited access to devices at home, school provision is planned so that no pupil is disadvantaged by this.

12. Health and Safety

Children and staff are taught to use equipment safely. Equipment is stored away from heat and water sources and is serviced and maintained regularly. Any damage must be reported to the IT technician immediately. No food or drink is consumed when working with ICT equipment. Staff promote healthy technology use, including awareness of screen time, digital wellbeing and the importance of balancing online and offline activities.

13. Online Safety

The school's Online Safety Policy (v1.4) sets out how pupils (appropriate to their age), staff, parents, Trustees and the wider community use the internet safely. Each year, parents give digital consent to follow the Online Safety Policy and for their child's photographs to be used. Online safety is taught through the computing curriculum, PSHE / RSHE and other subjects, and aligns with the UKCIS *Education for a Connected World* framework and Keeping Children Safe in Education 2026.

Where online safety is taught. The NCCE curriculum includes some online safety, for example using technology responsibly (Year 1), evaluating online content (Year 4) and copyright (Year 6). It does not cover the whole of the UKCIS *Education for a Connected World* framework, so online safety is also taught through PSHE / RSHE units such as *Staying Safe Online* (LKS2) and *Relationships and Online Safety* (UKS2), through assemblies and in response to emerging issues. Together these cover the eight strands of the framework: self-image and identity; online relationships; online reputation; online bullying; managing online information; health, wellbeing and lifestyle; privacy and security; and copyright and ownership.

Key expectations include:

- Pupils ask the teacher before using the internet and use it sensibly.
- Pupils are supervised by an adult when using the internet.
- Pupils only use sites the teacher has directed them to.
- Parents are responsible for monitoring their child's internet use at home.
- Pupils, parents, staff, Trustees and the wider school community follow the school's online safety rules in school and at home.
- Where known, the school informs parents and carers of inappropriate online behaviour in or out of school. This includes concerns about misinformation, disinformation, conspiracy theories and harmful AI-generated content, all of which KCSIE recognises as safeguarding risks.

Online safety education covers:

- How to use technology safely, responsibly, respectfully and securely.
- Where to go for help and support when worried about content or contact online.
- How to recognise and respond to misinformation, disinformation and conspiracy theories.
- How AI-generated content may be used to mislead or manipulate.
- Privacy settings, protecting personal information and data security.
- Positive online relationships and digital citizenship.
- Critical evaluation of online sources and information.

14. Children's Photographs on the School Website

The school follows government guidance on the safe use of children's photographs. We are aware of the risks posed by AI image generation and manipulation and make sure pupil images are used responsibly and cannot be easily misused.

- Children's photographs are only used on the website when parental consent is given.
- A child's name is not used next to their photograph, and a photograph is not displayed next to a child's name.
- Children's images only appear on the website when the children are appropriately dressed.
- Parental consent is sought annually.

15. Data Protection and Privacy

The school complies with UK GDPR, the Data Protection Act 2018 and the Data (Use and Access) Act 2025 in all uses of technology:

- Personal data about pupils and staff is processed lawfully, fairly and transparently.
- Privacy notices explain how technology, including AI tools, may process personal data.
- Data minimisation applies: only necessary data is collected and retained.
- Personal data is not shared with third-party technology providers without appropriate data processing agreements and safeguards.
- Where automated decision-making or profiling is used, pupils and parents are informed and appropriate safeguards are in place.
- The school's Data Protection Officer oversees all technology implementations to ensure compliance.

16. Monitoring and Review

This policy is reviewed annually. Because technology, and AI in particular, changes rapidly, it will be reviewed sooner if significant developments affect our practice, including publication of the revised National Curriculum. The Computing Lead, in consultation with the Designated Safeguarding Lead and the Senior Leadership Team, monitors emerging technologies and updates guidance as needed.

Approval

Signed (Principal)		Date:
Signed (Chair of the Trust Board)		Date: