



Computing Curriculum Overview

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Statement of Intent

Our computing curriculum enables learners with severe learning difficulties (SLD) to develop essential digital literacy, communication, and problem-solving skills through personalised, accessible, and engaging experiences. The aim is to enhance independence, confidence, and active participation in an increasingly digital world.

We are committed to inclusivity and accessibility, adapting all computing activities and resources to meet the diverse needs of our learners. This includes the use of assistive technologies, adaptive teaching, and multi-sensory approaches that reflect each learner's abilities, interests, and developmental stage. Functional digital literacy is prioritised, with a focus on supporting communication, social interaction, and daily living skills. Learners are also taught about online safety and responsible technology use to foster a safe and respectful digital environment.

By nurturing these skills within a supportive framework, our computing curriculum prepares learners for adulthood by equipping them with the digital competencies required for independent living, employment, and community participation.

Implementation

Computing at Cann Bridge School is delivered through discrete lessons, continuous provision, and cross-curricular opportunities. This ensures that learners experience computing in meaningful, functional contexts that promote engagement and understanding.

Curriculum Rolling Long Term Programme

The Rolling Long-Term Curriculum Programme provides a clear structure for developing computing knowledge and skills throughout each learner's school journey. Teachers adapt planning and delivery to meet diverse needs, using assessment frameworks to identify starting points and inform next steps.

Learners regularly apply computing in practical, real-life contexts—such as enterprise projects, AAC communication, and interactive iPad activities—to deepen understanding and strengthen functional digital skills essential for independence and adulthood.

Our computing curriculum is built around three core strands: Digital Literacy, Computer Science, and Information Technology.

- Digital Literacy forms the foundation, focusing on key skills such as internet navigation, digital communication, and media awareness.
- Computer Science introduces computational thinking and problem-solving through sensory and creative experiences, exploring algorithms, coding, and logical reasoning.
- Information Technology develops practical competence in using software, managing data, and creating digital content through projects in design, multimedia, and data handling.

Online safety is embedded throughout, ensuring learners understand digital security, privacy, and responsible online behaviour through interactive discussions, simulations, and workshops.

Our personalised, inclusive approach—supported by assistive technologies and adapted learning activities—ensures every learner can develop independence, communication, and confidence in a digital world.

Early Years Foundation Stage (EYFS)

In the EYFS, computing is integrated into the wider curriculum and embedded through exploration and play. Rather than taught as a discrete subject, computing concepts are developed naturally within activities that build curiosity, communication, and problem-solving skills.

Learners engage in role play, small world play, and construction activities that promote sequencing, cause-and-effect understanding, spatial awareness, and logical reasoning—all essential precursors to later computing learning. Pretend technologies such as toy phones and tablets encourage familiarity with digital tools and interfaces.

By embedding computing concepts in daily experiences, EYFS learners develop foundational skills, curiosity, and confidence, ensuring readiness for more formal computing education as they progress through the school.

Key Stage One

In Key Stage 1, learners build on early computing foundations through imaginative play, hands-on exploration, and practical activities. Role play and small world activities remain key to learning, helping pupils understand sequencing, problem-solving, and basic computational ideas.

Learners begin to use simple technologies such as tablets, laptops, and early robotics kits, developing familiarity with digital interfaces and basic control. They also start making simple choices within educational software, fostering independence and digital literacy.

Online safety is introduced explicitly at this stage, with learners exploring digital citizenship and responsible use of technology through age-appropriate discussions and activities. This ensures they begin developing safe and respectful digital habits early on.

Key Stage Two

In Key Stage 2, learners follow informal, semi-formal, or formal curriculum pathways according to their individual needs.

- **Informal pathway:** Focuses on continued development of cognitive and prerequisite computing skills through multi-sensory, exploratory experiences.
- **Semi-formal and formal pathways:** Introduce structured computing sessions covering digital literacy, computer science, and information technology, aligned with the National Curriculum and *Teach Computing* framework.

Learners engage in hands-on projects such as creating media, simple programming, data collection, and digital design. Practical sessions use a range of equipment, enabling learners to explore and apply computing skills that promote independence and real-world understanding.

Key Stage Three

In Key Stage 3, learners continue their respective pathways, building on prior learning through weekly dedicated computing lessons.

- Learners deepen their understanding of computing systems and networks, and advance their programming skills through more complex coding and problem-solving tasks.
- They create and edit multimedia content using a range of digital tools, developing creativity, technical competence, and digital communication.
- Data handling and analysis become more sophisticated, helping learners interpret and use information purposefully.

Online safety remains integral, ensuring learners can identify and manage risks while using technology confidently and responsibly.

Digital Skills in Key Stages Four and Five

In Key Stages 4 and 5, learners focus on developing practical Digital Skills that prepare them for independence beyond school.

Key areas include:

- **Online Safety and Citizenship:** Deepening understanding of responsible online behaviour and secure digital practices.
- **Digital Communication:** Refining communication skills across platforms such as email, presentations, and collaborative tools.
- **Content Creation:** Mastering tools for creating and editing multimedia materials to express ideas effectively.
- **Digital Transactions:** Learning to conduct safe, responsible online transactions, including budgeting and purchasing.
- **Technical Skills:** Understanding devices, hardware, software, and data management to use technology efficiently and ethically.

This practical, functional approach equips learners with the confidence and competence needed to thrive in a digital society.

Online Safety

Online safety is a core thread running through all computing education at Cann Bridge School. Learners receive regular, age-appropriate lessons, discussions, and activities that build awareness of digital risks and strategies for safe online behaviour.

The school also holds an annual Online Safety Day, where learners take part in interactive workshops and discussions to reinforce key messages and practical strategies for safe digital engagement.

Further guidance is detailed in the Online Safety Policy, which outlines school procedures, responsibilities, and safeguarding measures.

Teach Computing

Cann Bridge follows the Teach Computing scheme of work from the National Centre for Computing Education (NCCE) for Key Stages 2 and 3. This structured scheme ensures progression through small, sequential steps that build effectively on prior knowledge.

Online safety is integrated throughout, ensuring learners understand digital responsibility as they develop their technical and problem-solving skills.

Computing Medium-Term Planning

Computing Resources

Currently under review

Assessment and Accreditation

Progress in computing is tracked using B Squared Assessment Frameworks, providing a clear and consistent approach to monitoring and evaluating learning. This system identifies gaps in knowledge, informs planning, and supports personalised teaching.

In EYFS and Key Stage 1, computing progress is assessed using the Early Steps Assessment Framework. This is used as a baselining framework to identify pupils starting points in Key Stage 2 and beyond.

From Key Stage 2, for learners on the semi-formal and formal pathways, progression is guided by the *Progression Steps – Computing (Key Stage 2 & 3)* and *Step 4 Life – Digital Skills (Key Stage 4 & 5) Assessment Frameworks*, which align with and aspire towards the National Curriculum. These frameworks build on prior learning, providing personalised support, appropriate challenge, and opportunities for academic and personal growth.

For learners on the informal pathway, assessed using the *Engagement Model*, computing supports and measures engagement through multi-sensory interactive experiences. Here, activities are designed to stimulate interaction, with assessment focused on engagement rather than the acquisition of specific skills. Assessment and progress is captured using the Engagement Steps Assessment Framework.

For more information about our Assessment Processes, please see our Planning, Assessment, Marking, Reporting & Recording Policy

NOCN Employability Skills

In Key Stages 5, learners on the semi-formal and formal pathways work towards NOCN Entry Level Employability Skills, gaining formal recognition for their achievements and enhancing future opportunities in education, training, or employment. The NOCN Units Using ICT equipment in the workplace and Using ICT skills in the workplace are mapped into the Long-Term Programme. Evidence is collated in a portfolio against the unit criteria.

For more information, please see our Accreditation Policy and 14 to 19 Curriculum Policy.

Staff Training and Continued Professional Development (CPD)

Ongoing CPD is essential to maintaining high-quality computing provision and supporting staff confidence, subject knowledge, and pedagogical expertise. At Cann Bridge School, we prioritise a structured and responsive approach to professional development that reflects the evolving nature of technology and the diverse needs of our learners with severe learning difficulties.

Key CPD priorities include:

- **Staying Current:** Ensuring staff remain informed about emerging technologies, digital tools, and evidence-based approaches to computing education.
- **Effective Pedagogy:** Developing strategies for scaffolding, adapting content, and using concrete–pictorial–abstract methods to support learners across all pathways.
- **Curriculum Alignment:** Supporting staff to plan and deliver computing lessons in line with recognised frameworks such as *Teach Computing* and *B Squared*.
- **Inclusive Practice:** Equipping staff with tools to meet the needs of diverse learners, including those requiring assistive technologies or sensory-led approaches.
- **Audit and Targeted Support:** Conducting annual audits of staff confidence and subject knowledge to inform personalised CPD plans.
- **Moderation and Collaboration:** Holding regular moderation sessions to ensure consistency in assessment, share best practice, and foster collaborative reflection.

This structured approach to computing CPD strengthens teaching quality, promotes consistency, and enhances learner outcomes by ensuring all staff are equipped to deliver inclusive, engaging, and future-focused computing education.

Impact

Learners develop the digital literacy, problem-solving, and communication skills necessary to participate confidently in a technology-driven world. They will be able to use digital tools increasingly independently, create and manage content, navigate online environments safely, and apply computing skills in real-life contexts. Learners demonstrate increased confidence, autonomy, and resilience, equipping them for further education, employment, and active engagement in the community.

Monitoring, Evaluation, and Review

Equal access to the computing curriculum is maintained through continuous monitoring and evaluation. The Understanding of the World Team Lead meets regularly with the curriculum team to review learner progress and ensure alignment with the school development plan.

Monitoring activities include:

- Action Plan review
- PLG progress analysis
- Learning walks and planning scrutiny
- Curriculum conversations and moderation
- B Squared and Evisense analysis
- School Improvement Partner and Education Improvement Officer visits
- Stakeholder surveys
- Staff training evaluations
- Book looks

This policy links to the following policies and procedures:

- 14-19 Curriculum Policy
- Accreditation Policy
- EYFS Curriculum Booklet
- EYFS Policy
- Pathways to Independence Policy
- Planning, Assessment, Marking, Reporting & Recording Policy
- Curriculum Long-Term Rolling Programme
- Online Safety Policy
- Social Media Policy
- Bring Your Own Device Policy
- Mobile Phone Policy