# Computing Policy

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**Introduction:**

This policy sets out Connor Downs Academy's vision, aims and strategies for the teaching and learning of Computing. It is the basis for the development of Computing in our school and will be reviewed every year. In the policy, reference is made to other policies available on the school website.

**Vision and rationale for Computing:**

Computing knowledge & understanding underpins modern life and the 21st Century. Children need to build vital confidence, knowledge and understanding of the way technologies work - and how internet-connected systems can be employed - in order to adapt flexibly to ever rapid change over the coming years.

**Aims for Computing:**

Digitally confident learners equipped with modern Computing knowledge will:
• Understand how information technology, data systems, and the internet function
• Understand and be able to apply key programming concepts
• Design, create and manipulate different digital artefacts and media
• Competently apply operational skills to many types of technology
• Be cautious and safe users of screen and internet-based services
• Explain knowledge and understanding using key vocabulary

At Connor Downs Academy, we want to equip our pupils with the knowledge and skills they need in our increasingly technological world.

**Computing curriculum:**

Connor Downs Academy uses the Digital Learning Cornwall scheme of work to fulfil the requirements of the National Curriculum for Computing. It is important that Computing knowledge begins to develop from the earliest years, and builds appropriately as children develop. As learners revisit areas of understanding, and become ever-more confidently equipped, they will be able to harness the many opportunities that modern technology presents, while remaining safe and necessarily critical.
The intent for children's learning across Computing is mapped into three strands, dividing this broad subject into 3 main areas that build progressively throughout a child's time in primary education:

1. Computer Science;
2. Information Technology;
3. Digital Literacy.

The Computing outcomes of the National Curriculum have been used as a reference point for devising the suggested curriculum milestones – the points at which we aim for children to have acquired and mastered specific aspects of knowledge and understanding. The Digital Learning Cornwall scheme of work includes everything suggested by the NC, but in addition, to reflect the ever-growing breadth and importance of the subject, they have widened the scope of their milestones, with the intention that children become further equipped with a toolkit of understanding that is fit for secondary education – and for mastering the modern digital world confidently yet safely.
Progression through the curriculum milestones, and wider learning opportunities found within units of work, is based on key items of knowledge and skill being re-visited and expanded upon – sometimes referred to as a 'spiral curriculum'. This allows children to build, step by step, longer-term understanding by regularly revisiting, reusing and building upon each aspect of knowledge as they progress through the Computing curriculum.

**Curriculum leadership and management:**

Connor Downs Academy's Computing Lead, Debbie Crease, in conjunction with the head of school, leads the provision of Computing within the school. The Computing lead is responsible for:

- Developing a primary Computing curriculum which allows substantial progress to be made
- Leading teaching and learning
- Monitoring and evaluating standards of Computing teaching and learning across the school

- Managing resources, which support curriculum delivery
- Implementing arrangements for assessment in primary Computing
- Managing the professional development needs of other teachers involved in the delivery of primary Computing
- Attending termly Computing Lead network meetings

**Computing teaching methodology:**

Pupils are given regular opportunities to learn and utilise their Computing skills in computer science, information technology and digital literacy and use them to support their learning in a range of subjects. We believe that there are many advantages to pursuing 'unplugged' activities as much as possible, particularly within the early years and KS1 – where classrooms often act as a well-needed sanctuary away from the bombardment of screen-based activities elsewhere in children's lives. Unplugged activities across the school carry inherent advantages in terms of teacher's perceptions, resource reliability, and practicalities in a classroom.
In the Digital Learning Cornwall scheme of work, each unit of work utilises strands of Computing which correspond with the national curriculum for Computing. These units of work enable children to understand and build upon Computing concepts through a repetition-based approach to learning. The same concepts are learned and deepened through different activities and enable a more secure, deeper learning and mastery of computing skills. It is important to recognise that Computing is a vastly broad subject, and different areas of learning will be enhanced by employing different pedagogical approaches. Variety is the key to keeping this subject alive and interesting - while presentations and 'teacher talk' can have their place, Computing has the potential to be one of the most explorative, creative and interesting subject areas that children will encounter at school. Computing is a chance for children to thrive within very hands-on creative tools and learning that relates directly to the modern world.

**Embedding Computing in the curriculum and exploiting opportunities:**

Connor Downs Academy believes that pupils will learn Computing more effectively by having frequent exposure to it. As staff become more aware of and more confident, Computing will be increasingly embedded in the curriculum. The Computing Lead has worked with teachers to highlight opportunities in medium term planning where Computing can be embedded.

**Assessment, recording and reporting:**

Assessment in Computing is primarily to inform and support teaching and learning, enabling the class teacher to refine planning to best meet learner needs. During lessons, the class teacher, where appropriate, will unobtrusively record evidence of particular competences as they emerge in the course of teaching and learning. Any work produced in Computing lessons will be marked in accordance with the school's marking policy.

**Inclusion:**

Connor Downs Academy firmly believes in the value of Computing learning for all pupils, regardless of race, ability or gender. Differentiated approaches are employed to seek to ensure that all learners in the classroom are able to make optimum progress. Despite the fact that Computing includes the discreet and specific learning of Computer Science, it also contains a broad and rich range of relevant, modern skills. The many applied elements of Information Technology and Digital Literacy provide a varied menu of knowledge and skills and can be particularly relevant for SEND children who may find engagement with such processes to be liberating and inspiring. The aim of fostering independence and providing children with skills for life is a key part of why Computing is an increasingly central part of our curriculum offering. For SEND children, sometimes harnessing tech-based functionality is a clear way to open-up access to learning, and self-motivating areas of interest for the coming years.

**Resources and accommodation:**

**Resources available in school:**

- **List of current resources kept in Computing Lead file and an electronic copy sent to staff, updated as necessary.**

We also borrow resources from Aspire where applicable and necessary to supplement resources in school and increase the range of technology available for our pupils to utilise in the classroom. The Computing Lead is also keen to engage with outside providers who can provide enhanced learning for our pupils.

The Computing Lead is responsible for maintaining resources (alongside Aspire ICThelp), monitoring their use, and organising storage. Resource purchasing is in accordance with normal school procedures and is based upon the Computing budget.

**Health & Safety:**

Refer to the school's Health and Safety document.

**Review:**

Monitoring is carried out by the Head of School and the Computing lead, in the following ways:

- observation of teaching
- ongoing, informative discussion with teachers
- pupil voice discussion
- review of Computing displays (where appropriate)
- book scrutiny

There will be an annual review of this policy by the Computing subject lead.