

Computing

Intent, Implementation and Impact

<u>Intent</u>

By the time children leave Boorley Park, we want them to have developed a strong foundation in computing skills, digital literacy, and computational thinking. This means they should be confident in using technology, able to solve problems through coding, and understand the importance of online safety and ethics. The curriculum aligns with the school's values by promoting creativity, critical thinking, and collaboration—skills that are crucial not just for the digital world, but for their overall development within the community.

The curriculum is designed to be coherent, with a clear progression of skills. It is mapped out to ensure children build upon their knowledge each year. For example, in lower Key Stage 2, children learn the basics of coding, and in upper Key Stage 2, they are applying these concepts to more complex projects.

From Year R, children are introduced to basic concepts such as using technology for exploration and problem-solving. As they move through the years, they gradually engage with more complex topics such as coding, digital literacy, and the ethical use of technology.

The curriculum is designed with high expectations for all students, regardless of their starting points. The technical and academic ambition is consistent across the board, ensuring that every pupil has access to learning opportunities that foster both creative and logical thinking. Additionally, by introducing practical skills like coding and problem-solving, it also offers a vocational dimension that prepares children for their future.

The computing curriculum offers a balanced approach with a combination of coding, digital literacy, online safety, and the creative use of technology. The topics have been sequenced so that younger children focus on foundational skills (such as basic computer operations and internet safety), and as they progress, they delve deeper into coding, data handling, and problem-solving. My expectation is that by the end of Year 6, all students should have developed key computing skills, including the ability to code simple programs, understand how digital systems work, and appreciate the importance of online safety and ethical technology use.

<u>Implementation</u>

The computing curriculum at Boorley Park follows the Teach Computing programme, which offers a well-sequenced and progressive curriculum with clearly defined outcomes for each year group. The Teach Computing curriculum is ambitious, inclusive and broad in scope. It is constructed around four key strands: programming, computing systems, data and information, and creating media. Each year group covers these strands in age-appropriate ways that progressively develop pupils' skills and understanding.

Computing is taught weekly in all year groups from Year 1 to Year 6. In Early Years, computing is embedded through continuous provision and themed activities that support early understanding of technology and digital awareness.

The Teach Computing curriculum includes comprehensive lesson plans, teacher guides, slides, and assessment tools, making it highly supportive for both subject specialists and non-specialists.

Assessment in computing is primarily formative, taking place throughout each unit. Teachers assess pupils through questioning, observation, class discussion, and the quality of their digital work. At the end of each unit, teachers make a summative judgment about whether pupils are working towards, at or above expected standard. This information is used to identify pupils who may need additional support or challenge and to inform future planning. Pupil voice and digital portfolios also play a role in tracking progression over time.

Monitoring includes virtual 'book looks' (e.g. digital work samples or screenshots), lesson visits, pupil conferencing and teacher discussions. I use these to evaluate the quality of teaching and learning across the school and to identify areas of strength and development. The quality of work in computing is good overall—pupils are engaged, produce creative work, and can articulate their learning confidently.

Computing naturally lends itself to real-world application and cultural relevance. Resources are chosen to reflect diverse learners and inclusive practices, ensuring all pupils see themselves represented in the subject.

Where possible, we enhance computing with enrichment opportunities such as virtual workshops with coding organisations and involvement in national events like Safer Internet Day. These experiences aim to inspire pupils, show real-world applications of computing.

Lessons are scaffolded and differentiated so that all learners can access and succeed. The curriculum includes inclusive imagery, real-world contexts from diverse cultures, and opportunities to explore accessibility in technology (e.g. designing apps or games for different users). Pupils are encouraged to work collaboratively and respect each other's contributions.

Impact

The most recent data, based on teacher assessments and subject monitoring, shows that the majority of pupils are achieving age-related expectations in Computing. An area for improvement is ensuring development of children's understanding of e-safety. We are also improving opportunities for pupils to apply computing skills across the curriculum, particularly in creative projects and cross-curricular links.

Pupils make clear progress as they move through the computing curriculum. They are able to recall and build on prior knowledge. Pupil conferencing and work samples show that children remember key concepts such as how to stay safe online, how to debug code, and how to use technology to communicate and create.

Regular retrieval opportunities built into the Teach Computing curriculum help reinforce long-term memory.

Subject monitoring—including work samples and pupil discussions—shows strong progression in both knowledge and vocabulary. Children in upper KS2 use technical language with confidence and apply logic and problem-solving independently in programming tasks. Younger children are beginning to demonstrate a solid grasp of foundational skills, such as using a mouse, keyboard, and understanding the purpose of different types of technology.

Pupils with SEND are supported through differentiated activities, tailored scaffolding and access to assistive technology where appropriate. Lessons are designed to be inclusive and multisensory, using visual instructions, physical computing (e.g. Beebots or Micro:bits), and collaborative tasks to ensure understanding.

Pupil conferencing suggests that children enjoy computing lessons and see them as both fun and meaningful. They are enthusiastic about coding (Scratch) and particularly enjoy practical tasks such as game creation, media projects and using software to design or present information. Pupils also express an understanding of why computing matters and how it connects to real-world jobs and everyday life. Many describe computing as one of their favourite subjects, especially when lessons are hands-on and collaborative.