

Computing Curriculum Policy

Approved by Governors:	Date: May 2024	
Signature of Governor:	Name:	Signature:

Intent

Our computing curriculum ensures learning is engaging and relevant to what our children will need to succeed in life. It allows children to build confidence using technology which is particularly important given the current increase in reliance of technology. Our aim is for our children to see themselves as 'Coders', 'Programmers' and confident using different digital devices, who are equipped with the relevant knowledge and skills. Across the children's time at Westglade, they will build upon their knowledge each year, which will support children as they make the transition to secondary school and will also aid in further life. Through clear links to staying safe online, children will be able to ensure that they can protect themselves when using technology and become sensible and safe technology users. We have a range of technological devices that children have access to in order to ensure that they are digitally literate.

Our school follows the National Curriculum guidance for computing to ensure that all pupils are able to:

- understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- be responsible, competent, confident and creative users of information and communication technology.

Implementation

In the Early Years, children are not explicitly taught computing. Instead, in line with the Early Years framework, children are exposed to a range of technology through the environment to build to foundations of their understanding. From Year 1 upwards, the children are designated one lesson of Computing learning a week. Flashbacks are used at the start of lessons to cover online safety. Children have access to a wide range of resources including individual class sets of laptops and iPads which can be used across school. We use Teach Computing as a cohesive scheme of work addressing the statutory aspects of the National Curriculum. This ensures that there is a clear progression of skills fully embedded across both key stages. Computing is branched into three aspects: Computer Science; Information Technology; and Digital Literacy, so that our pupils are set a relevant, challenging continuum of age-related skills and knowledge for their own year groups within Key Stage 2. Computing is also covered within early years through carefully planned activities that introduce children to relevant a current technology in their lives. Computing is also used to enhance other areas of the curriculum through cross-curricular learning. This could be the use of research as 'Digimaps' in Geography lessons, presenting data in Maths and Science using Excel or exploring images in Art through digital media.

Following the Teach Computing units ensures substantial progress and learning is achieved. Each teaching unit is divided into multiple fully planned lessons with supportive resources for both teachers and pupils. As pupils progress though the lessons in a unit they will build their knowledge and develop the complexity of the skills being focused upon. Enrichment opportunities, such as after school clubs, at certain points during the year allow children to enhance and master learning further. Children are also able to save any work on the 'Student share' which is organised into individual class folders where appropriate. These folders will move up on the server with them so they can build on prior knowledge and show progression that has been made throughout their time at Westglade. Work that is 'unplugged' and designed to give the theoretical understanding of concepts before applying them to the technology is evidence through the computing display within each classroom. It is the expectation that if children are secure when using the technology, they have the sound theoretical knowledge that has come from 'unplugged' lessons. To supplement the use of Teach Computing, teachers draw from 'Project Evolve' to support pupils' development of safety and digital literacy. Both schemes are endorsed by the DfE.

The strands of computing from the National Curriculum that we deliver:

- Computer science
- Information technology

Digital literacy

<u>Assessment</u>

Pupil attainment in computing is tracked using the whole school attainment map throughout the year. Judgements are informed by TeachComputing assessment as well as assessment of outcomes during lessons. Teachers use their professional judgement to make an assessment at the end of the year as to whether children have met age expectations.

Adaptive Teaching

At Westglade, we aim to enable all children to achieve their full potential. This includes children of all abilities, social and cultural backgrounds, those with disabilities, children with English as an additional language and children with SEN support and an EHCP. We are aware of the flexibility technology brings to allowing pupils to access learning opportunities, particularly pupils with SEN and disabilities. Activities through the scheme of work takes into careful consideration of children's individual needs to encourage full and active participation from all children. Sessions are planned to appropriately challenge all abilities and adapt where necessary to be accessible for all. Adaptations are present for those children who require extra support.

Monitoring

The head teacher and Senior Management Team monitor the effectiveness of this policy. They also report to the governing body and, if necessary, makes recommendations for further improvements. In addition, the computing leader checks coverage, conducts pupil voice interviews to assess knowledge, completes work audits and observes sessions. This is done in line with school policy and overseen by the senior management team.

Impact

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. By the time they leave Westglade, children will have gained key knowledge and skills in the three main areas of the computing curriculum: computer science (programming and understanding how digital systems work), information technology (using computer systems to store, retrieve and send information) and digital literacy (evaluating digital content and using technology safely and respectfully). By becoming digitally literate — children become computational thinkers, using computing to express themselves and develop their ideas through, information and communication technology — at a level suitable for the future workplace and as active participants in a digital world. The objectives within each strand support the development of learning across the key stages, ensuring a solid grounding for future learning and beyond.