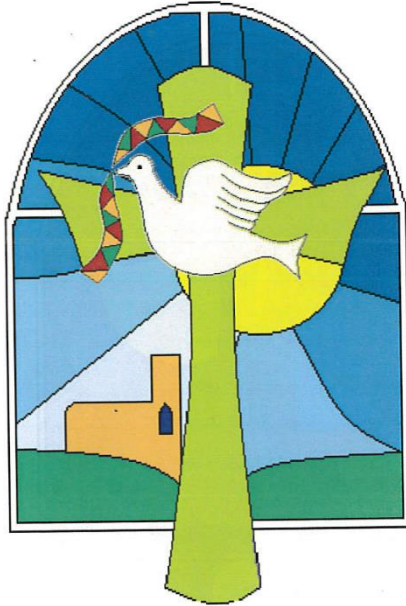


Computing Policy

Wolds Federation



Our Christian Vision is that our children will be agents for change in their own lives, in their local community and in their global community.

"Technology is best when it brings people together"

Matt Mullenvey

Date: April 2024

Review: April 2026



Introduction

This Computing Policy covers all aspects of the Computing curriculum. The Computing curriculum is divided up into three strands: Information Technology, Computer Science and Digital Literacy. This curriculum is implemented throughout the Federation from the Early Years Foundation Stage through to Year 6 through the use of Teach Computing and Project Evolve.

Intent

Due to an ever-changing world and the vast amount of technology that is around in young children's lives, computing plays a key role in our curriculum. Our Curriculum ensures that all children:

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

Implement

The Implementation of the Computing curriculum is provided to children in a blocking format; where 6 lessons are taught over the space of two weeks. This allows the children to constantly be building upon their prior knowledge, ensuring the thread of computing enquiry is consolidated and therefore that the information has been retained in children's long term memory. Computing is currently being taught through Teach Computing and Project Evolve. The Teach Computing Curriculum is a comprehensive collection of material to facilitate the delivery of the entire computing curriculum in KS1 and KS2. In our Federation the Teach Computing curriculum is enhanced by Project Evolve which offers lessons that focuses on the eight Digital Literacy strands: Self Image and Identity, Online Relationships, Online Reputation, Online Bullying, Managing Online Information, Health, Well-being and Lifestyle, Privacy and Security and Copyright and Ownership. In turn, both these programmes come together to provide a broad and balanced Computing Curriculum which is in line with the National Curriculum.



Computing National Curriculum (2014)

Key Stage 1

Pupils should be taught to:

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- Create and debug simple programs
- Use logical reasoning to predict the behaviour of simple programs
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content
- Recognise common uses of information technology beyond school
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Key Stage 2

Pupils should be taught to:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.



Impact: Assessment

In computing every lesson includes formative assessment opportunities for teachers to use. These opportunities are listed in the lesson plan and are included to ensure that misconceptions are recognised and addressed if they occur. They vary from teacher observation or questioning, to marked activities. These assessments are vital to ensure that we as teachers are adapting our teaching to suit the needs of the pupils that we work with. The learning objective and success criteria are introduced in the slides at the beginning of every lesson. At the end of every lesson, pupils are invited to assess how well they feel they have met the learning objective using thumbs up, thumbs sideways, or thumbs down. This gives pupils a reminder of the content that has been covered, as well as a chance to reflect. It is also a chance for teachers to see how confident the class is feeling so that they can make changes to subsequent lessons accordingly.

At the end of each unit, in both KS1 and KS2, teachers will complete an assessment sheet outlining the children who are working at the standard and those that are working below. Notes are then written that explains teacher judgement and any next steps. These are uploaded onto teams so the subject leader has access to them for monitoring purposes.

The Role of the Subject Lead

The Computing Curriculum Leader is responsible for the implementation of this policy; the management and repairs of Computing resources through School Based Curriculum Support, monitoring Computing standards of achievement and progression, and working with SLT to arrange appropriate Inset for all members of staff where necessary. The Class Teachers are responsible for the delivery of this policy and the care and security of the hardware and software. The school is committed to the ongoing resourcing of Computing equipment and software. The school is responsible for ensuring that copyright regulations are not infringed.

Effective and efficient deployment of ICT resources

ICT resources are deployed throughout the school to maximise access, to enhance teaching & learning and to raise attainment. To enable regular and whole class teaching of computing the school has laptops which all classes in Key Stages 1 and 2 use for their computing blocks to develop their ICT skills. Children also have access to laptops during the day to enhance their curriculum through online educational platforms such as Lexia, Numbots, Times Table Rockstars and Spelling shed. All classrooms have interactive whiteboards available at all times. A consistent interface is provided on all machines to enable familiarity and continuity with generic 'toolkit' software licensed and available on all curriculum computers in school. A curriculum 'peer to peer' network enables internet access on all machines as well as storage and access to shared files.



Internet Access and Online-safety

Although Internet Access within school is protected by Firewall and Filtering systems, the risks of internet use are still present. We believe it is vital to teach Online-safety (Digital Literacy) as part of the Computing curriculum. This is taught throughout the year and specific areas are uniquely prioritised for each class using the Project Evolve Knowledge maps. In recent years there has been a boom in the education opportunities that are available online. We have bought into the following to give children safe access to online educational opportunities outside of school. These are:

- Spelling Shed
- Times Table Rockstars/ Numbots
- Lexia

All pupils have passwords that can be used to access these sites. Children have been shown how to use them and how to keep their passwords safe from others.

Copyright

The Wolds Federation has a responsibility to teach and uphold the laws and guidance on copyright. Images on the internet are not freely available and we have a responsibility to teach children how to check and use information and images appropriately.

