



St Mary's CE Primary School



Computing Policy 2025-2026

Preparing our pupils for the digital world; unlocking
the potential

Computing Statement of Intent

Technology is changing the lives of everyone. Through teaching computing we equip our children to participate in a rapidly changing world where work and leisure activities are increasingly transformed by technology.

It is our intention to enable children to find, explore, analyse, exchange and present information. We also focus on developing the skills necessary for children to be able to use information in an effective way.

Computing skills are a major factor in enabling children to be confident, creative and independent learners and it is our intention that children have every opportunity available to allow them to achieve this.

St Mary's CE Primary School is a Christian school where the entire atmosphere is pervaded by the conviction that there is something mysterious, and potentially wonderful, in everybody. Christian principles therefore underpin everything we do, so that good manners, good discipline and respect become part of everyday life. Every child here is valued as a unique individual.

Our school is governed by the four values which can be rooted in Biblical teaching that underpin our daily existence at school and hopefully also at home. These are: "Respect, Pride, Endeavour, and Love." Children understand these and can apply them to situations in school.

We will Respect our parents, our teachers, and the law and values of Great Britain and each other.

Peter 5:5

In the same way, you who are younger submit yourselves to your elders.

We will Endeavour to be the best we can be.

Colossians 3:23

Whatever you do, work at it with all your heart, as working for the Lord.

We will have Pride in our work, our school community and in our country.

Galatians 6:4

Each one should test their own actions. Then they can take Pride in themselves.

The Role of Computing

Computing teaches an understanding of the technological world. St Mary's understands the immense value technology plays not only in supporting the Computing and whole school curriculum but overall in the day-to-day life of our school. We believe that technology should provide enhanced collaborative learning opportunities, easier access to rich content, better engagement for pupils, support conceptual understanding of new concepts and can support the needs of all our pupils.

Substantive and Disciplinary Knowledge in Computing

Our Computing curriculum uses a knowledge-based approach to learning. This allows teachers to ensure learning is developed systematically, building on previous knowledge in order to help children know more and remember more over time.

Substantive Knowledge in Computing is based on the key concepts of Computing – Digital Literacy, Computer Science and Information Technology. In our Computing curriculum, this Computing knowledge and enquiry is taught within real-life contexts (where possible) including key vocabulary and knowledge sentences. Progressing from EYFS to year 6, children build on prior knowledge in a sequence of small steps.

Disciplinary knowledge in Computing involves children applying what they have learned to real-life situations by planning/ designing, creating, editing and evaluating a range of applications. Computational thinking enables children to work out exactly what to tell the computer to do using a range of concepts and approaches. With links to R.S.E. children will use problem solving skills to investigate dilemmas relating to online conduct and relationships.

Aims

As a school we aim to:

- To ensure that all pupils are confident in using code and can understand and apply the fundamental principles and concepts of computer science, including logic, algorithms and data representation
- To ensure that all pupils, when coding, can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- To ensure that all pupils can effectively communicate and can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- To ensure that all pupils are able to connect with others responsibly and are competent, confident and creative users of information and communication technology
- Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.
- Enthuse and equip pupils with the capability to use technology throughout their lives.
- Give pupils access to a variety of high quality hardware, software and unplugged resources.
- Instil critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with technology.
- Teach pupils to become responsible, respectful and competent users of data, information and communication technology.

- Teach pupils to understand the importance of the laws surrounding how information is used, stored, created, retrieved, shared and manipulated.
- Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves and others.
- Use technology imaginatively and creatively to inspire and engage all pupils.
- Provide technology solutions for forging better home and school links, e.g., Class Dojo.
- Use technological thinking beyond the Computing curriculum.
- Work in accordance with the government guidance for the programme of study and other related legislative guidance (online safety).

Safeguarding: Online Safety

For our Online Safety curriculum, we follow the online programme – Google Internet Legends. This helps us in assessing the pupils’ knowledge and allows teachers to deliver the content that children need. It concentrates on areas such as cyber bullying, friends, passwords, time online, private information and digital footprint.

Online safety is of the utmost importance at St Mary’s. We ensure this profile is maintained and that pupil needs are met by the following:

- A relevant up-to-date online safety curriculum which is progressive from Early years to the end of Year 6.
- A curriculum that is threaded throughout other curriculums and embedded in the day-to-day lives of our pupils.
- Training for staff and governors which is relevant to their needs and positively impacts on the pupils.
- Scheduled pupil voice sessions, including appropriate use of the School Council, and learning walks to inform training needs.
- Through home/school links, parent voice and other communication channels, parents are kept up to date with relevant online safety matters, policies and agreements. They know who to contact at school if they have concerns.
- Pupils, staff and parents have access to the Acceptable Use of Technology policy.
- Our E-Safety policy clearly states how monitoring of online safety is undertaken and any incidents/infringements to it are dealt with.
- Filtering and monitoring systems for all our online systems.
- Data policies, in line with GDPR guidelines, which stipulate how we keep confidential information secure.

Teaching and Learning

As a school we have chosen to use a range of programmes and resources to support our curriculum from Reception to Year 6. Year 1 to Year 6 use the ‘Teach Computing’ scheme as a basis and in Foundation Stage they use ‘Barefoot’ as a basis. These resources and programs support our teachers in delivering fun and engaging lessons which help to raise standards and allow all pupils to achieve to their full potential across our concentric curriculum. We are confident that our scheme of work more than adequately meets the national vision for Computing. It provides immense flexibility, strong cross-curricular links and integrates perfectly with our current assessment toolkit.

Resources

All resources needed are kept in the computing cupboard located along the Key Stage 1 corridor and are labelled accordingly. All equipment should be returned to the store and the teacher should ensure that all the equipment is accounted for before returning. Any equipment needed that we do not possess should be asked for in advance, so that every effort can be made to fulfil the request.

Early Years and Foundation Stage

We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts. We believe that the EYFS learning environment should feature ICT scenarios based on experience in the real world (e.g., role play). This should allow our pupils to gain confidence, control and language skills through opportunities to 'paint' on interactive boards, iPads or control remotely operated toys. Outdoor exploration can be supported by ICT toys such as walkie-talkie sets, bee-bots and recording devices can support pupils to develop their communication skills. This is especially useful for pupils who have English as an additional language.

Key Stage 1

In KS1, one of the ways we are teaching the pupils about the language and concepts associated with computer programming is by using Bee Bots and Blue-bots, which are simple programmable robots. We also plan to introduce pupils to the programme we use for coding but a more simplified version - Scratch Junior. In this programme, pupils will be able to make their own backgrounds and move sprites across the screen.

By the end of Key Stage 1, pupils should be able to understand what algorithms are, how they are implemented as programs on digital devices and that programs are executed by following a sequence of instructions. The pupils should be able to write and test simple programs, as well as organise, store, manipulate and retrieve data in a range of digital formats. They will learn how to communicate safely and respectfully online, keeping personal information private and recognise common uses of information technology beyond school.

Key Stage 2

In KS2, we are developing a widespread use of a variety of programs; these programs enable pupils to develop knowledge, understanding and skills in computer programming. They entale programming language where children can create interactive programs such as stories, games, interactive quizzes and animation. As children create with the various programs they learn to think creatively, work collaboratively and reason systematically.

By the end of Key Stage 2, pupils should be able to design and write programs that accomplish specific goals, including controlling or simulating physical systems and use sequence, selection and repetition in programs. The pupils should be able to use logical reasoning to explain how simple algorithms work and to detect and correct errors in algorithms and programs. They will understand

computer networks including the internet, how it can provide multiple services such as the world wide web and the opportunities it offers for communication and collaboration. They will learn how to use search engines effectively, evaluate digital content, respect individuals and intellectual property, use technology responsibly, securely and safely. Furthermore, they will be able to select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Assessment

Teachers will complete the relevant statements for each pupil on Target Tracker at the end of each term. Teachers will also assess children's work in Computing by making informal judgements during lessons and over the course of the year. This assessment will be used to plan for future learning. Written or verbal feedback is given to the child to help guide his/her progress. Target Tracker allows staff to accurately identify attainment of pupils through the detailed exemplification it has for each key learning intention. If the children have gaps in learning, then individual targets will be set and shared with parents during parent's meetings.

Monitoring

It is the Computing lead's responsibility to ensure that the statements on Target Tracker are completed for each year group. All teachers are expected to track pupil's work through Target Tracker. Monitoring of the quality of teaching will take place through observations, work scrutiny's, learning walks, pupil and teacher voice, reflective teacher feedback and learning environment monitoring. Feedback will be given to individual teachers both verbally and in written form. When monitoring takes place, feedback will be given to the whole school as well as the individual departments. Written feedback will be given to the department.

Inclusion

At St Mary's, we aim to enable all children to achieve to their full potential. This includes pupils of all abilities, social and cultural backgrounds, those with disabilities, EAL speakers and SEN statement and non-statement. We place particular emphasis on the flexibility technology brings to allowing pupils to access learning opportunities, particularly pupils with SEN and disabilities. With this in mind, we will ensure additional access to technology is provided throughout the school day and in some cases beyond the school day.

Health and Safety

St Mary's takes all necessary measures to ensure both staff and pupils are aware of the importance of health and safety. Both staff and pupils are trained to handle electrical equipment correctly, including how to power off and on. Pupils are reminded about the dangers of electricity and the danger signs to look out for. Adequate displays and warning signs are strategically placed around school to reinforce health and safety.