Computing Policy

‘Rise above the ordinary’

2025 onwards

THE DIOCESE OF SHEFFIELD ACADEMIES TRUST

Computing Policy

School Vision and Values

Our Vision

We will work as a whole school community to support and deliver a high quality, nurturing and respectful learning environment that inspires all of our children to rise above the ordinary. Our school is committed to being an environment that is open to the spirituality of children.

We will encourage all children to understand and adapt positively as active citizens and courageous advocates – to participate and make a difference in the diverse world in which we live.

Through our high standards of teaching and personalised learning, within a broad and balanced ambitious curriculum, we prepare our learners to make a positive contribution towards society and enjoy future success.

Our Mission "Rise above the Ordinary"

At St. Mary's we provide a welcoming, safe and happy school where everyone is respected and listened to; a school where we take pride in ourselves and our achievements, enabling children to become confident and successful learners.
We aim to rise above the ordinary and promote excellence by providing a positive, inclusive environment for learning and growth. Inspired by our faith in God, and together, we aim for each child to become the best version of themselves in mind, body and spirit. Our Theological Rationale further encapsulates what we believe in.

St Mary's Vision for Computing

At St Mary's, computing is understood as part of God's wonderful creation: ordered, purposeful and rich in pattern and beauty. Every child is a unique individual, made in the image of God (Genesis 1:27), and therefore of infinite worth. Through computing, we seek to enable all pupils to flourish, develop confidence, and recognise their potential as learners and contributors to society (Psalm 139:13–16).

Guided by our **RISE values – Respect, Inspire, Support and Exceed** – and informed by the **White Rose Maths** approach, our computing curriculum is ambitious, inclusive and carefully sequenced so that all pupils, including the most vulnerable, can make strong progress from their starting points.

Our vision for our children:

• **Respect** computing as a universal language that helps them understand and engage with the world God has created, developing enjoyment, curiosity and a sense of wonder (Psalm 104:24–25).

• Be **inspired** to think deeply, ask questions and reason mathematically, using precise vocabulary and representations to explain their thinking, recognising that God equips them with the ability to learn and grow (Philippians 2:13).

• Be **supported** to develop resilience and perseverance when solving problems, learning from mistakes within a safe and nurturing environment, and encouraged to work collaboratively so that all can succeed (Philippians 3:14).

• Be challenged to **exceed** expectations by making meaningful connections within computing and across the wider curriculum and real life, building cultural capital and understanding that all knowledge is held together in Christ (Colossians 1:17).

• Develop fluency as a secure foundation for reasoning and problem-solving, enabling them to apply their learning confidently and independently.

As a Christian community, we place high value on relationships, **respecting** the dignity of every learner and **supporting** one another through encouragement and collaboration (1 Thessalonians 5:11). Teaching and assessment are used purposefully to identify misconceptions, inform next steps, and ensure that all pupils are given the opportunity to succeed and **exceed** their own expectations.

Our vision is that every child will leave St Mary's as a confident, capable and enthusiastic computer scientist who uses their God-given gifts responsibly and wisely (1 Peter 4:10), equipped with the knowledge, skills and attitudes needed to contribute positively to society, living as salt and light in the world (Matthew 5:13–16).

Aims

Through the teaching of computing, we aim to ensure that all pupils:

- Develop a secure understanding of the principles of computer science.
- Gain proficiency in using technology to create, communicate, and collaborate.
- Understand the importance of online safety and the ethical use of technology.
- Become resilient problem solvers who can design, code, and evaluate algorithms.
- Apply their computational thinking in real-life scenarios.

Teaching is underpinned by the **Teach Computing** approach, ensuring learning is carefully structured, inclusive and builds conceptual understanding before procedural fluency. Assessment is used effectively to identify misconceptions, inform planning, and provide timely support or challenge so that all pupils can succeed and exceed expectations.

Through computing, we seek to inspire pupils to use their God-given talents wisely, developing the knowledge, skills and attitudes they need to contribute positively to society and live out our Christian values as they grow as learners and individuals.

Why is Computing important?

Computing is important because it equips children with the knowledge, skills and attitudes they need to understand the world, succeed in learning, and make informed choices in everyday life. **At St. Mary's we believe that computing is a vital skill that empowers our students to think critically, solve problems, and express their creativity. Our goal is to provide a comprehensive computing curriculum that caters to all learners, fostering a passion for technology and its applications in everyday life.**

Computing is important because it:

- **Develops essential life skills**
  Computing helps children to solve problems, reason logically, think critically and make sound decisions.
- **Builds confidence and resilience**
  Through computing, children learn to persevere, learn from mistakes and develop a growth mindset. This resilience supports learning across the curriculum and prepares pupils for future challenges.
- **Supports success across the curriculum**
  Computational understanding underpins learning in science, mathematics, design technology, and supports data handling, logical thinking and analytical skills in many subjects.
- **Promotes equality and opportunity**
  Secure computational knowledge opens doors to future education, careers and life choices. By ensuring all pupils develop strong foundations, computing helps reduce barriers and supports social mobility.
- **Encourages curiosity and creativity**
  Computing allows pupils to explore patterns, relationships and structures, fostering curiosity, imagination and a sense of wonder about the world.
- **Helps pupils understand and engage with the world**
  From interpreting statistics in the media to understanding technology and global issues, computing enables pupils to engage confidently and responsibly with modern society.

- **Reflects order, structure and beauty**
  Within a Christian vision, computing reveals the order and pattern in God's creation, helping pupils appreciate both its beauty and its purpose.

At St Mary's, computing is taught as an ambitious, inclusive and carefully structured subject that enables all pupils to develop fluency, reasoning and problem-solving skills. Through computing, we aim to inspire pupils to use their God-given talents wisely, supporting them to flourish academically, socially and spiritually.

How Computing is Taught at St Mary's

As outlined in the 2014 National Curriculum for Computing, our curriculum comprises three key areas:

1. Computer Science
    a. Understand and apply the fundamental principles of computer science, including logic, algorithms, and decomposition.
    b. Use programming languages to create and debug algorithms.
    c. Recognise the impact of computer science on individuals, society, and the economy.
2. Information Technology
    a. Use technology to manipulate data and create effective presentations and digital products.
    b. Develop the skills to retrieve, store, and manage information using appropriate software and tools.
    c. Collaborate using technology for shared tasks and projects.
3. Digital Literacy
    a. Understand the importance of being safe and responsible online.
    b. Develop skills to navigate and evaluate online content critically.
    c. Promote effective communication and digital citizenship.

Teaching and Learning

We plan a range of teaching and learning strategies to ensure inclusivity and engagement in computing lessons. These strategies include:

- Differentiated tasks that cater to various ability levels.
- Collaborative projects that promote teamwork and peer learning.
- Practical lessons that utilise a range of software and hardware.
- Integration of cross-curricular themes that allow application of computing concepts in other subjects.
- Use of assessment for learning to inform teaching and provide feedback to pupils.

How We Check Progress in Mathematics at St Mary's

Assessment Methods

- Regular formative assessments will be conducted to monitor progress and understanding, including formal assessment made by teacher observation.
- Feedback will be given to provide students with clear next steps for improvement.
- Assessment outcomes will be recorded and used to inform future curriculum planning and individual learning paths.

Monitoring

The quality and effectiveness of mathematics teaching and learning are monitored regularly to ensure high standards are maintained across the school. Monitoring activities include:

- **Book scrutiny**, to check progression, consistency, presentation, feedback and coverage of the curriculum
- **Lesson visits and learning walks**, focusing on teaching approaches, pupil engagement and use of representations
- **Pupil discussions**, to evaluate understanding, enjoyment and recall of learning
- **Data analysis**, to identify trends, strengths and areas for development and these are discussed with teachers at half-termly pupil progress meetings.

Monitoring is carried out by the **Mathematics Subject Leader** and senior leaders and findings are used to inform action planning and professional development.

Online Safety

At St. Mary's, we prioritise the safety and well-being of our pupils in their use of technology. We ensure:

- Regular teaching of online safety curriculum tailored to age and understanding.
- Parental engagement through workshops and resources on keeping children safe online.
- Regular updates for staff on best practices and legal responsibilities regarding online safety.

Reporting

According to the most recent framework by Ofsted, outstanding schools must demonstrate:

- Intention to provide a broad and balanced curriculum that meets the needs of all learners.
- Rigorous assessment strategies that track pupil progress and inform future learning.
- Effective safeguarding measures for all aspects of learning, particularly in the online environment.
- High-quality professional development opportunities for staff, promoting best teaching practices.
- Strong partnerships with parents and the wider community.

By adhering to these expectations and following this policy framework, St.Mary's strives to provide an outstanding computing education that prepares our pupils not only for the digital world but also for their future as informed and responsible citizens.

Evaluation

The computing policy will be reviewed annually to ensure that it meets the needs of pupils and aligns with changes in the National Curriculum and best practices in education. Feedback from staff, pupils, and parents will be solicited to enhance the effectiveness of our computing provision.

Roles and Responsibilities

We are committed to providing ongoing professional development for our teaching staff to enhance their computing subject knowledge and pedagogical skills. Opportunities for training may include:

- In-house workshops on new technologies and teaching methodologies.
- External training courses and partnerships with local computing organisations.
- Peer observations to share best practices and reflect on teaching.

Parental Engagement

We believe that engaging parents and carers in the computing education of their children is essential. We will:

- Provide resources to help parents understand the computing curriculum and how they can support learning at home.
- Encourage parents to share experiences of technology-related projects completed at home.