



Creativity



Challenge



Community

St Mary's Computing Subject Intent Document

Our Curriculum Intent at St Mary's CE School:

To develop a carefully designed, sequential curriculum, underpinned by progressive knowledge and understanding, equipping our children for their future lives. It is aspirational, providing problem solving, challenge and creativity whilst developing character including responsibility, reliability and perseverance. The curriculum ensures the children are able to celebrate uniqueness and diversity and apply their learning to positively impact the local, national and global community.

In order to achieve our Curriculum Intent, we have designed our curriculum around the following **Principles of design**:



Creativity

We design our curriculum to be as creative as possible, inspiring through first hand experiences which are inclusive and meeting the needs of the individual. We aim to learn and think creatively through a broad curriculum which enables all learners to discover, celebrate and nurture their talents.



Challenge

Inclusively, we aim to challenge all pupils through high expectations of behaviour and academic success. Working collectively, supporting one another, our curriculum broadens children's life experiences and enables children to take risks in a supportive environment. Central to this, is building self esteem and encouraging deep thinking, valuing pupil voice and providing rich learning experiences.



Community

Not only do we engage the community in learning, but we encourage sharing learning with the community. We aim to provide a curriculum which establishes a good foundation to enable our children to be inspired to make a difference in the world. Outdoor learning and taking responsibility for the environment is central to this as well as contributing meaningfully to our local, national and global community.

End points of our curriculum:

Principles of design					
Aspiration	PP / SEND / HAPS / EAL	Extended experiences	Subject related careers e.g. how learning is applicable / related to real world situation		
Core Knowledge	Subject based				
Procedural / Powerful Knowledge (skills)	Literacy / numeracy reinforcing opportunities within subjects	Debate / oracy skills and confidence	Opportunities to grapple with big concepts / ideas	1. Communication 2. Problem solving 3. Resilience 4. Initiative 5. Organisation 6. Teamwork 7. Digital literacy 8. Creativity	
Developing Cultural capital	Student Entitlements (e.g. trips / out of school clubs / residential)	Vocabulary extension and aspiration	Wider reading (stretch & challenge texts)	Engaging with inspirational visits and visiting speakers	School Values: Trust Responsibility Respect Honesty Perseverance
Developing Character	Values being lived out in practice	Excellent behaviour for learning	Attendance and punctuality	Independent study skills	
Creativity					
Identifying and addressing Context specific need Community	Healthy lifestyles (Healthy relationships)	Rural Engagement with Yorkshire Dales and Lake District	Developing Understanding of Diversity within the country and world		
Learning is Sequential	Key themes enhanced by Rosenshine's Principles of Instruction				



Computing Vision:

Our intent is comprised of the following 3 sections:

1. Our vision for the subject and the purpose it serves for our pupils
2. Defining what the key concepts and core domains of knowledge are, that pupils will learn about
3. The end points our curriculum is working towards

1. Our vision

At St Mary's we intend to provide a carefully designed, sequential computing curriculum that strives to promote opportunities for children to access a high-quality computing education which equips them to use creative computational thinking, enabling them to be good 21st Century global citizens. Through carefully chosen, varied and progressive physical devices, creative media opportunities and access to a wide range of software, our aim is to provide contextual problem-solving opportunities which will challenge perseverance and responsibility whilst encouraging highly aspirational outcomes, knowledge and understanding. We aim for our children to be confident, competent and discerning users of digital technology, in real life contexts, preparing them for participation in a rapidly changing, and increasingly collaborative world.

2. Our key concepts and core domains of knowledge

We recognise that pupils are entitled to a broad computing education with a structured approach to learning how computer systems work, using computers for functional purposes and using such technology safely, recognising its advantages for collaboration and communication. Following detailed research and testing, we have selected and planned for a range of physical, programmable devices to progressively develop programming in a real-life context. As with all subjects, we implement teaching and learning using a variety of class, individual and group work, direct teaching, pupil investigation and skills practice. Staff confidence and expertise in the understanding and implementation of the curriculum has been developed through numerous staff training opportunities and allowing staff opportunities to consult and work closely together. Full class sets of Chromebooks and Android tablets are available throughout school and allow individual and focused collaborative learning through the computing curriculum, and, reinforcing previously learned skills, across the wider curriculum.

Unit assessment and pupil voice interviews are used throughout the year to monitor the progress and learning and identify areas for further challenge or support.

Online Safety

Online safety is embedded deeply within our scheme of work to ensure safe and responsible use of technology for all pupils and staff. We work hard to keep up to date on possible dangers and share these regularly with the children at an age appropriate level, supported by the Senior Leadership Team and Safeguarding Governor.

3. The end points of our curriculum

Our curriculum encourages a fun, engaging and relevant experience in computing technologies and computational thinking. The quality of children’s learning is monitored and celebrated through photographic and video evidence, children’s Google Drive files and project files where necessary. The wide range of real-life contexts the children are exposed to, along with the skills and understanding developed throughout the school, equip pupils for continued success throughout KS3 and 4 and prepares them for their role as a global citizen.

By following our curriculum map, at the end of each Key Stage our learners will be able to:

EYFS	Key Stage 1	Key Stage 2
<p>Although there are no formal mentions of computing in the EYFS curriculum, it is such an important skill for future life that the use of technology, both for using and programming, is planned throughout our Early Years stages. We use tablets, desktop computers and Codapillar devices to encourage problem solving and a sense of awe and wonder.</p>	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 • Appreciate how search results are selected and ranked • Use search technologies effectively • Select, use and combine a variety of software (including internet services) on a wide 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. • Understand the opportunities networks offer for communication and collaboration • Be discerning in evaluating digital content • Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Our curriculum is designed to be easily adaptable by professional teachers to ensure appropriate challenge, including those Higher Attaining Pupils, and scaffolding to meet the needs of all children, including those with SEND. Teachers ensure that prior learning for all children is assessed in order to adapt planning for each area of knowledge and investigation, and content is then appropriately adapted to fit the individual needs of the children in each class – for children with SEND, this is done in accordance with IEPs/EHCPs.