Computing Curriculum Statement – September 2022

Our School Vision:

Our aim is for all to belong to a safe and happy community which celebrates our diversity and differences. Our children will be well prepared for the next step of their journey as responsible citizens. We aspire for all to flourish.

Intent

At St Mary and St Giles, we aim to prepare our learners for their future by giving them the opportunities to gain knowledge and develop skills that will equip them for an ever-changing digital world. Knowledge and understanding of ICT is of increasing importance for children's future both at home and for employment. Our Computing curriculum focuses on a progression of skills in digital literacy, computer science, information technology and online safety to ensure that children become competent in safely using, as well as understanding, technology. These strands are revisited repeatedly through a range of themes during children's time in school to ensure the learning is embedded and skills are successfully developed. Our intention is that Computing also supports children's creativity and cross curricular learning to engage children and enrich their experiences in school.

Our whole curriculum is shaped by our school vision which aims to enable all children, regardless of background, ability, additional needs, to become responsible citizens and flourish. It is underpinned by our curriculum drivers:

	Opportunity	We strive to provide a range of opportunities to excite, motivate and enthuse our children. By bringing opportunities to use computing skills across all areas of the curriculum, we provide opportunities for inspiration and ambition for children's futures. As we plan to provide 1:1 devices for children in the near future, we aspire for all to access a broad curriculum enhanced by digital technologies. The opportunity to use a wide range of software to create, program, research and attain a wide range of computing skills is at the heart of our computing curriculum.
	Enquiry	We encourage children to be inquisitive thinkers who are able to problem solve throughout their interactions with digital resources. We want to develop a natural curiosity to computing as well as enabling children to ask relevant and critical questions to keep themselves safe online, recognise appropriate content and think logically about computer science.
	Language	Language rich environments and lessons develop a rich vocabulary which we want our children to use confidently and accurately. We want to develop expressive and articulate young people who have a broad and relevant vocabulary to digital platforms that are adaptive and ever changing.

We teach the National Curriculum, supported by a clear skills and knowledge progression. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children. It is important that the children develop progressive skills of a computer scientist throughout their time at St Mary and St Giles. In computing, children need to be able to interact confidently with a wide range of programs and platforms, understand how computers work and generate information that we constantly interact with and create content for a wide range of purposes. As a result of this rich, broad and balanced curriculum, their knowledge of computer science, information technology and digital literacy will provide them with a deep, long-term, secure and adaptable understanding of the subject.

Impact

By the time the children at St Mary and St Giles leave our school they should be able 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.
- understand the important role played by technology in the local area both today and in the past (e.g. Bletchley Park; the Motor racing industry at Silverstone and the surrounding area)