# St. Mary's Church of England Primary School, Fownhope

## The Teaching of Computing

*A rich education is more than simply learning reading, writing and maths. It is about helping a child grow into their full potential as inquisitive, well balanced and cheerful adults. As a Christian school we nurture children to display the 'fruit of the Spirit', which is "love, joy, peace, patience, kindness, goodness, faithfulness, gentleness and self-control" (Galatians 5:22-23). At St Mary's you will find children growing in mind, body and spirit as they form good relationships with each other, the staff and discover a faith which will sustain them in a rapidly changing world. As our motto has it: "what we nurture today flourishes tomorrow".*

**Our philosophy for teaching computing:**

At St. Mary's every child will learn about all aspects of Computing in a safe and nurturing environment. We aim to promote a love of learning in the subject and a curiosity to build on existing knowledge. We use computing to enhance the experiences of all members of our school community and extend learning experiences out beyond our school. Children will have access to laptops, iPads and other computing equipment to offer them a balanced overview of the computing curriculum, including online safety, word processing and coding. Children of all abilities will be supported to achieve and make good progress in Computing.

| Year Group | Intent – what we want to achieve (National Curriculum objective) | Implementation - what it looks like in the classroom | Impact – how we measure success and what we will see |
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| EYFS | **Understanding the World**<br><br>**Early Learning Goal 15 – Technology**<br><br>Children in Reception will be learning to:-<br>• complete a simple program on a computer.<br>• use ICT hardware to interact with age-appropriate computer software.<br>• recognise that a range of technology is used in places such as homes and schools.<br>• select and use technology for particular purposes. | • Access to IWB and IT games that link with children's learning during freeflow<br>• Phonics, handwriting (Letterjoin) and maths games on iPads<br>• Beebots<br>• Tapestry to document learning journeys/ children's interests<br>• Twinkl internet safety units. | • Children are curious and want to learn about new technology.<br>• They are excited to use technology in their play and want to positively engage with it.<br>• Children will understand how to use simple age appropriate games and devices. |

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| Key Stage 1 | • understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions<br>• create and debug simple programs<br>• use logical reasoning to predict the behaviour of simple programs<br>• use technology purposefully to create, organise, store, manipulate and retrieve digital content<br>• recognise common uses of information technology beyond school<br>• use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies | • Weekly computing lessons whenever possible<br>• Computing skills integrated into other curricular lessons as often as possible<br>• Espresso Coding<br>• Beebots<br>• Laptops - word processing using Microsoft Word<br>• iPads- Letterjoin app, Education City, Hit the Button, Prodigy, Times Table Rock Stars<br>• Teacher using IWB to support children with research<br>• Internet safety<br>• Seesaw<br>• Teachcomputing.org units of work | • Teachers assess children against lesson objectives so that most children will be able achieve age appropriate objectives.<br>• Children will transfer the skills they have learned in computing lessons across the curriculum.<br>• Children will understand how computers can enhance their learning and support their development.<br>• Children will be excited and curious to develop their understanding of new technologies.<br>• Impact will be judged through lesson observations, regular assessment and evidence of the children's ability to use computing skills in a range of contexts across the curriculum. |
| Key Stage 2 | • design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts<br>• use sequence, selection, and repetition in programs; work with variables and various forms of input and output<br>• use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs<br>• 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<br>• use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content | • Espresso coding (block coding, html and python)<br>• Beebots<br>• Laptops- internet research, word processing, PowerPoint, publishing written work, Excel spreadsheets, Nessy Fingers<br>• Code club<br>• Twinkl computing planning units for basic skills and coding<br>• Flowol<br>• iPads- internet research, Letterjoin handwriting, Dyslexia Gold, Sumdog, Prodigy, Times | • Teachers assess children against lesson objectives so that most children will be able achieve age appropriate objectives.<br>• Children will transfer the skills they have learned in computing lessons across the curriculum.<br>• Children will understand how computers can enhance their learning and support their development.<br>• Children will be excited and curious to develop their understanding of new technologies. |

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| | • 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.<br><br>• use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact | Table Rock Stars, Beebot app, Spelling Frame, Hit the Button<br><br>• Internet safety- Google 'Be internet legends', Smart Crew<br><br>• Lego Movie Maker for stop motion animation<br><br>• Kahoot quizzes<br><br>• Seesaw<br><br>• Teachcomputing.org units of work | • Children are able to use technology responsibly.<br><br>• Children have developed an enjoyment of learning through technology.<br><br>• Children will leave the school equipped with the technological skills and knowledge to guide them through high school and life in the outside world.<br><br>• Impact will be judged through lesson observations, regular assessment and evidence of the children's ability to use computing skills in a range of contexts across the curriculum. |