# St Oswald's Catholic Primary School <u>CURRICULUM OVERVIEW</u>

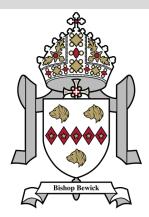


# Computing



'Living, Learning and Loving Together with Christ'

Subject Lead: Jen Gray Deputy Lead: Katie Morris



## Overview

At St. Oswald's, we are aware that we live in a world of technological advance where micro-electronics are commonplace and the ability to use Computing effectively is a vital life skill.

Pupils will be given, where appropriate, opportunities to develop and apply Computing in the study of other National Curriculum subjects as well as to develop Computing capability in its own right.

At the end of Key Stage 2 our aim is that pupils can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation; can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems; can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems and are responsible, competent, confident and creative users of information and communication technology.

#### Intent

Our intention is to produce learners who are confident and effective users of Computing. We strive to do this by encouraging every child to use a variety of technological equipment in their work and to do so with purpose, enjoyment and confidence.



We aim to give every child the opportunity to explore a range of computer systems and control technology, to develop the necessary skills for them to work effectively, to introduce the children to a variety of software which will develop Computing as a tool for learning and investigation in National Curriculum subjects so that they can achieve the highest possible standards of achievement and to use Computing as a vehicle to create opportunities for both collaborative and independent learning regardless of the child's age or ability, and for the learning experience to be an enjoyable one.

'Technology is not just a tool. It can give learners a voice that they may not have had before.'

-George Couros



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### Implementation

Our progressive units of work are designed to be modified for our children and their experiences. All children will be treated as individuals and their needs catered for on that basis, allowing all to access our inclusive education in school.

Computing in schools is taught as a discrete subject in its own right but it also supports children's learning in other subjects, including English, Mathematics, RE, Science, History and Geography. Cross-curricular activities offer many opportunities for children to learn and apply skills taught in Computing and to enhance creativity.



At Key stage 1, pupils should be taught to understand what algorithms are; to create and debug simple programs; to use logical reasoning to predict the behaviour of simple programs; to use technology purposefully to create, organise, store, manipulate and retrieve digital content; to recognise common uses of information technology beyond school; and to use technology safely and respectfully and to keep personal information private, identifying where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

At Key stage 2, pupils should be taught to design, write and debug programs that accomplish specific goals; to use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs; to understand computer networks including the internet; to use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content; to 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; and to use technology safely, respectfully and responsibly, recognise acceptable/unacceptable behaviour and identify a range of ways to report concerns about content and contact.



'Computer education is more important than computers'

-Paul Rand

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#### Impact

We strive to ensure that our pupils' attainment is in line with or exceeds their potential when we consider the varied starting points of all our children. Through our progressive skill-based curriculum, we are measuring the children's ability, striving for them to meet their age-related expectations for their year group.

'Everybody in this country should use a computer, because it teaches you how to think.'



-Steve Jobs



All pupils are given opportunities to become familiar with a range of information communication technologies and to develop the skills to use them effectively and with confidence, so as to further their educational development.

Our Computing curriculum ensures that all pupils are digitally literate to a standard that prepares them for the next stage of their learning in KS3 and beyond.





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