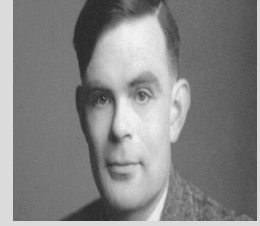## Vision for Computing

'We're changing the world with technology'

(Bill Gates)

Computing at St Mary's is seen as an important part of the curriculum as it enables children to learn vital skills of which are continuously developing in a modern technological world. From Reception through to year 6, children will begin to acquire computing skills and computing creativity which will help them to become confident INDEPENDENT learners when using ICT across all areas of the curriculum.

Our children will show RESILIENCE when learning new and challenging concepts in computing. They will have the opportunity to REFLECT on their learning and apply their skills across other areas of the curriculum. They will learn and understand computing language such as algorithms and coding, and begin to understand how these apply to their everyday lives and how it may transfer into technology currently being used across the world as well as POSSIBILITIES for the future. They will recognise how computing can be used to represent information in a variety of ways.

Children will become confident when using a variety of computing tools across the school, such as laptops, the internet, iPads or cameras. Children will begin to think critically about how they can use ICT in a cross curricular way themselves, such as for research or THE ARTS. Children will also begin to understand the wider implications of using technology- such as how technology has brought the world closer together, enabling us to learn more about different CULTURES and become more aware of the WELLBEING of others. We then encourage children to develop their ORACY skills and present their findings. Children will be taught how to keep their own WELLBEING and safety paramount when using any online resource.

We aim to give our children a computing curriculum which equips them with skills for the future, an understanding of how ICT increasingly encompasses our lives, as well as enhancing their learning through excitement and wonder. We aim for our children to become digitally literate- to be able to use and express themselves using their own INTIATIVE and develop their ideas through computing- at a level suitable for the future workplace and as an active participant in a digital world.

Purpose of study

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.