

Computing Curriculum Statement

Curriculum Intent

At St Mary and All Saints, we ensure the teaching of Computing develops children's fascination and curiosity by equipping them with skills to develop their computational thinking and creativity to understand the world. We aim to give our pupils the life-skills that will enable them to embrace and utilise new technology in a socially responsible and safe way to flourish. We want children to become autonomous, independent users of computing technologies, gaining confidence and enjoyment from their activities. Not only do we want them to be digitally literate and competent end-users of technology but through our computer science lessons we want them to develop creativity, resilience and problem-solving and critical thinking skills. We want our pupils to have a breadth of experience to develop their understanding of themselves as individuals within their community but also as members of a wider global community and as responsible digital citizens. High quality computing equips pupils to use computational thinking and creativity to understand and change the world (The National Curriculum 2014).

In line with the National Curriculum Objectives for Computing, our intent is that all 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 to solve such problems
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- Are responsible, competent, confident and creative users of information and communication technology.

Curriculum Implementation

The progression of skills throughout school allows children to build on prior knowledge and allows, as they progress through the curriculum, for them to express themselves in many different media using technology. Children are actively engaged in developing their understanding of how to use the internet safely. Our Computing curriculum is delivered through our own scheme of work. This begins at reception and continues up to Year 6. This builds on several strands including:

- Word Processing
- Data
- Presentation
- Animation
- Video Creation
- Digital Art
- Augmented Reality
- Computer Science and Programming
- Artificial Intelligence

These topics are aligned with the National Curriculum and help to develop a solid understanding of the key computing concepts as well as progressively building on fundamental computing skills. Our children always have access to iPads and have access to programmable toys and more resources to begin experimenting with Computer Science. Through our E-safety sessions, taught each half-term, we encourage children to question and be aware of aspects of the online world that may not always be actively thinking about. Our E-Safety curriculum is based on the Project Evolve Scheme of Work and builds children's knowledge year on year.

Impact

The impact of the teaching of Computing is assessed in a number of ways. Children leave St Mary and All Saints with a good understanding of the skills needed to survive in the digital world. Formal assessment by curriculum books and work uploaded to Seesaw as well as work saved on the main student drive. This is used alongside more informal observation and discussions. Through uploading work to Seesaw, we can showcase learning with parents as well as providing a wealth of information used for moderation purposes. Throughout their time at St Mary and All Saints, the children will have experience of an increasing number of technologies including: Computers, iPads, Microbits, Beebots and other programmable toys. Many of the skills from computing are transferrable which provides a wealth of learning opportunities across the curriculum subjects including art, D&T, maths, history, geography, science, RE and literacy. This ensures pupils can make connections across subject areas and embed knowledge and understanding.