**Computing**

**Intent, Implementation and Impact**

**Underpinned by our Curriculum Drivers: Faith and Oracy**

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| **INTENT** | **IMPLEMENTATION** | **IMPACT** |
| At St Mary’s we value the contribution that technology can make for the benefit of all pupils, staff, parents and governors. We strive to provide safe opportunities in all subjects to motivate and inspire pupils and raise standards across the curriculum. Everyone in our school community will become lifelong learners equipped to meet developing technology with confidence, enthusiasm and the skills that will prepare them for a future in a rapidly changing world where work and leisure activities are increasingly transformed by technology. At St. Marys we follow a progression of skills document. This allows us to teach and build on skills and knowledge each year. Children are given the opportunity to explore and use a wide range of technology within lessons, allowing them to secure and deepen their understanding. Classes are each allocated a weekly timeslot for the ICT Suite as well as access to class sets of iPads.  **Aims**     * To enable our staff and pupils to become competent, confident, and independent users of technology. * To provide pupils with the computing skills necessary to become independent learners through a stimulating and challenging curriculum. * To experience computing across the curriculum, enriching and extending learning by providing access to a wide range of technology. * To provide pupils with opportunities to apply their computing skills in other areas of the curriculum. * To promote safe and sensible use of information and technology. * To provide continuity and progression in all strands of the Computing National Curriculum at Key stage 1 and 2. * To provide pupils with an understanding of the role of computing in the world around them and its importance in the future. * To ensure appropriate and equal access to technology for all pupils regardless of age, gender, ethnicity or ability. * To commit to the continuous professional development of computing for staff. | **Planning**: Computing is planned to cover the programme of study for computing as outlined in the National Curriculum. We have developed a whole school progression of skills document which ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children.  Computing is taught using a blocked curriculum approach. This ensures pupils are able to develop depth in their knowledge and skills over the duration of each of their computing topics. Teachers plan units to cover each half term to really give children an opportunity to explore, secure and deepen their understanding of computing.  To ensure a broad range of skills and understanding, Computing is taught across three main strands: digital literacy, computer science and information technology. Teachers use planning and resources on Purple Mash to support them in creating and sequencing their unit of lessons appropriately for units of digital literacy and information technology strands. Purple Mash is also used to enhance the overall teaching of computing by using the wide range of educational apps, quizzes and writing projects to further develop children’s learning.  Teachers use and follow the coding programme on Discovery Education Espresso to develop skills in programming and computational thinking to support their teaching of computer science.  Each class has timetabled access to the Computer Room and use of iPads. Time allocated to the subject is in line with statutory guidance. Individual classes have flexibility within this structure to use timings to meet the needs of pupils. Each class teacher will provide regular computing lessons that may vary in length but will generally last for the equivalent of at least one hour a week. The time may be spent in class or in the Computer Room.  Computing is also embedded through cross curricular activities and lessons to give teachers more flexibility to ensure they are covering the necessary computing objectives for their year group. Employing cross-curricular links motivates pupils and supports them to make connections and remember the steps they have been taught.  Pupils also have access to a variety of technology to support their learning including devices such as programmable beebots, programmable robots, voice recorders and the interactive whiteboard. We give pupils of all abilities the opportunity to develop their skills, knowledge and understanding in computing. We also strive to deliver a clear progression of skills so that there is an increasing challenge as pupils progress through school.  De Bono’s Thinking Hats are used as a learning tool when teaching computing across the school. They are used to support critical, analytical and creative thinking particularly related to problem solving. Class teachers reference the thinking hats in their planning.  All pupils have equal access to the computing curriculum through differentiated lessons. Where appropriate, support may be provided through the use of educational software or equipment e.g. a roller ball as an alternative to a mouse to support pupil’s fine motor skills or headsets to reduce ambient noise. The needs of more able pupils are addressed through extension activities.  **EYFS**  Computing is planned following the Early Years Foundation Stage (EYFS) Development Matters strands. It is covered under a technology strand in Understanding the World. Computing offers pupils an opportunity to ask questions about how things work and enables them to become increasingly independent learners. Pupils have access to computers to develop their mouse skills, programmable toys, hand held devices as well as use of the interactive whiteboard (IWB). Pupils focus on key skills in becoming familiar with different forms of technology and how this can support their learning. | At St Mary’s Catholic Primary School, we expect that by the end of year 6 our children;   * Be enthusiastic and confident in their approach towards Computing. * Present as competent and adaptable ‘Computational Thinkers’ who are able to use identified concepts and approaches in all of their learning. * Have a secure understanding of the positive applications and specific risks associated with a broad range of digital technology.   In order for this to happen, the Computing team, the Headteacher and the Senior Leadership Team take responsibility for the monitoring of the Computing curriculum and the standards achieved by the children. The Computing team will assess against learning objectives in the following way:   * Ongoing dialogue between the teacher and pupils whilst they are working. * Teacher review and assessment of work done during the lesson. * Work done during the lesson saved either on the secure Discovery Education Espresso Coding platform (for programming), the Purple Mash platform (for computer skill activities) or the school’s secure pupil server. * The subject leader will request samples of pupil’s work, on a termly basis, in order to build a school portfolio that can be used to support staff’s understanding of skills progression. * Pupil voice surveys and/or questionnaires. * Staff complete their computing assessments in order to track pupil’s progress against the curriculum requirements. * Staff will regularly update their computing displays and ensure that the use of technology is evident within their planning. |