St. Peter's Catholic Primary School, Gloucester

Computing Curriculum IMPLEMENTATION Statement

At St. Peter's Catholic Primary School, the Early Years Foundation Stage (EYFS) Framework and the National Curriculum are used as the fundamental base to design an exciting and inspiring progressive Computing curriculum that maps out the knowledge and skills that we want our children to learn and experience in Computing.

The EYFS curriculum is the start of every child's journey to becoming a computational thinker. There are seven areas of learning and development within the EYFS curriculum. All are important and inter-connected as they build a foundation for igniting children's curiosity and enthusiasm for learning, forming relationships and thriving.

There is no Early Learning Goal for technology in the EYFS curriculum, however, we want to 'foster their understanding of our culturally, socially, technologically and ecologically diverse world'. Computational Thinking is at the heart of the computing curriculum and children will only be ready for this subject if we provide them with foundational experiences. The EYFS curriculum incorporates Computational Thinking skills from Barefoot Computing to enhance their curriculum.

The key areas of learning that encourage computational thinking skills include:

- **Communication and Language:** Collaboration, Persevering, Logic, Pattern, Abstraction and Algorithms and Decomposition
- **Personal, Social and Emotional Development:** Collaboration and Persevering
- **Physical Development:** Tinkering and Creating

From Y1, the children work progressively towards the National Curriculum for Computing which aims to ensure 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 in order 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

Our Computing curriculum is designed to:

- revisit and build upon prior learning within Computing and to make links across all subjects. Retrieval opportunities, such as low stakes quizzes, are planned in Computing and enable our children to recall prior learning and/or to make connections between current and prior learning thus embedding knowledge from their working memory to their long term memory.
- develop and enrich every child's cultural capital through access to high quality information, texts, resources and educational trips
- inspire every pupil to have a love for learning in Computing

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In implementing the curriculum, we ensure that teaching in all subjects incorporates the key principles of high-quality teaching and mastery learning. At St. Peter's we believe teaching approaches that ensure **long-term retention of knowledge, fluency in key skills and confident use of metacognitive strategies are crucial**. These are fundamental to learning and are the 'bread and butter' of effective teaching:

- **cognitive strategies** include Computing specific strategies or memorisation techniques
- **metacognitive strategies** are what we use to monitor or control our cognition

In implementing the Computing curriculum, teachers ensure that every opportunity is taken to remind the children of how 'what' they are learning is linked to our whole school curriculum intent and whole school vision:

Computing Curriculum INTENT Statement

At St. Peter's Catholic Primary School, our mission is to share the good news of Jesus Christ with all in our school family so that each child grows in the knowledge that they are formed in the image and likeness of God who calls them to love and be loved, and that they hear and respond to the call to "live wisely, love generously and learn to think deeply." (Pope Francis, Laudato Si, 2016).						
Following in Jesus' footsteps, we live, love and learn together as a school family, to build a better world.						
It is our intention that the St. Peter's Curriculum will:						
Nourish and nurture	**Empower our children with the knowledge and skills to:**			**augment remembering**	**Develop key attributes**	**Inspire**
	LIVE	**LOVE**	**LEARN**			
Talents – curriculum, enrichment and extra-curricular opportunities Faith RE curriculum Disadvantaged incl SEND and PP	Responsible citizens: Local, National International Fund raising Global challenges: Laudato Si & Fratelli Tutti	Inclusion: SEND Disadvantaged Other Cultures and beliefs Gospel message CST – social justice and help those in need	Think deeply: mastery and enquiry questions Successful learners: lifelong learners Aspirations Growth mindset RP Confident individuals: Self-regulation & Metacognitive strategies Role models	Retrieval Spiral curriculum – golden threads	Independence Resilience Perseverance Team players Effective communication skills Problem solvers Risk takers	Parental engagement Oracy and reading Cultural capital

Computing is taught weekly throughout the Autumn, Spring and Summer Terms.

Our Computing curriculum has 4 themes: Computing Systems and Networks, Creating Media, Programming and Data and Information. Each of the themes is revisited regularly and pupils revisit each theme through a new unit that consolidates and builds on prior learning.

The Computing curriculum is implemented following the Computing coverage document and progression is detailed in the Computing skills progression document.

Vocabulary development in Computing is also important as pupils' acquisition and command of vocabulary are key to their learning and progress not just in Computing but across the whole curriculum. Our Computing vocabulary progression document shows how we actively develop vocabulary in Computing.

Finally, we use assessment to check pupils' understanding of what the Computing curriculum intent says they should know, and to identify and correct misunderstanding and inform teaching.

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