St Gregory's Primary School Computing Policy

Intent:

All pupils at St. Gregory's Primary School have the right to have rich, deep learning experiences that balance all the aspects of computing. With technology playing such a significant role in society today, we believe 'Computational Thinking' is a skill children must be taught if they are able to participate ***responsibly*** and safely in this digital world. A high-quality computing education equips pupils to use 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. At St. Gregory's Primary School, the core of computing is Computing Science in which pupils are introduced to a wide range of technology, including iPads, PCs and interactive whiteboards, allowing them to continually practise and improve the skills they learn. This ensures they become digitally literate so that they are able to express themselves and develop their ideas through information and computer technology- at a level suitable for the future workplace as active participates in a digital world.

At St. Gregory's Primary School, we teach a curriculum that enables children to become effective users of technology who can:

- Understand and apply the essential principles and concepts of Computer Science, including logic, algorithms and data representation;
- Demonstrate ***resilience*** and analyse problems in computational terms, and have repeated experience of writing computer programs in order to solve such problems;
- Evaluate ***reflectively*** and apply information technology analytically to solve problems;
- Communicate ideas *creatively* by utilising appliances and devices throughout all areas of the curriculum.

Implementation:

Teachers at St. Gregory's Primary School plan the following:

- Access to computational language for all children to understand and eventually apply;
- A cycle of lessons for computing, which carefully plans progression and depth;
- Live questioning and task summary which increases space in the working memory;
- Challenge questions for pupils to apply their knowledge in a philosophical/open manner;
- Opportunities to see computing in action in real-world scenarios.

Impact:

Our Computing curriculum is tailored to demonstrate points of progression. If children are keeping up with the curriculum, they are deemed to be making good or better progress. In addition, we measure the impact of our curriculum through the following methods:

- A reflection on standards achieved against the planned outcomes
- Children can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation;
- Children can analyse problems in computational terms, show ***curiosity*** when solving errors and have repeated experience of writing computer programs in order to solve such problems;
- Children can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems;
- Children are responsible, competent, confident and creative users of information and communication technology.
- Clear year group transition in assessment which identifies the future needs of each child.
- Pupil discussion about their learning.