



St Ambrose Barlow Catholic Primary School

Computing

Statement of Intent, Implementation and Impact

The national curriculum for computing 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. At St Ambrose Barlow Catholic Primary School, we intend to provide such a high quality Computing education

Intent:

At St. Ambrose Barlow primary school we believe a high-quality computing education equips pupils to use logical thinking and creativity to understand and change the world. Computing is both a significant part of everyone's daily life and the curriculum.

With technology playing such a significant role in society today, we believe 'Computational thinking' is a skill, children must be taught if they are to be able to participate effectively 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, design and technology and provides insights into both natural and artificial systems. The structure and sequence of the lessons help to ensure the coverage of skills required to meet the aims of the NC, with a whole school plan set out based upon topics. These different schemes of work will allow children to:

- To use technology safely and respectfully, St Ambrose Barlow School takes internet safety extremely seriously. We have an E-Safety Policy that provides guidance for teachers and children about how to use the internet safely. Every year group participates in lessons on E-safety and children understand how to stay safe when using technology.
- KS1 pupils - will understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions. Use JIT 5 Turtle create and debug simple programs. Use JIT5 paint and mix to purposefully to create, organise, store, manipulate and retrieve digital content.
- KS2 pupils - will use the programmes: J2Code, J2Vote, iMovie, Scratch, QR codes and Microsoft Word Online to design, write and debug programs that accomplish specific goals, use sequence, selection, and repetition in programs, work with variables and various forms of input and output, use logical reasoning to explain how some simple algorithms work, detect and correct errors in algorithms and programs and use search technologies effectively.

Implementation:

Children are taught stand-alone Computing lessons weekly.

Each unit, comes with an overview which outlines each lesson task, learning outcomes, resources and links to NC.

Each year group has 6 units of work labelled as 1.1, 1.2, 2.1, 2.2, 3.1, 3.2 for each half term, two of which are computer science based. Over the course of study, teaching is designed to help learners to remember in the long term the content they have been taught and to integrate new knowledge into larger concepts

Lessons develop their techniques, control and their use of technology - simpler programmes in KS1 moving onto more complex programmes.

SEND pupils will be supported through the differentiated resources, linking back to previous year groups to build upon their current skill level

Impact:

Teachers have resources readily available to them with modelled examples to use during teaching.

Summative assessments take place throughout the year and teachers record the progress and attainment against the National Curriculum expectations of attainment and the SC for each terms specific scheme of work.

Teachers use this information to inform future lessons; ensuring children are supported and challenged appropriately.

High expectations are set and quality evidence on BGFL system.

Children will become more confident in applying the different skills and building upon them particularly from KS1 to KS2 therefore they will be ready for the next stage of education. Children can speak confidently about the topics they have covered during lessons and are responsible, competent, confident and creative users of information and communication technology.

Further information is gathered through pupil questionnaires; drop in sessions by co-ordinator and review of work on BGFL system.

The Coordinator highlights strengths, achievement and any improvements, knowledge and skills that still need to be embedded.