Computing Intent, Implementation & Impact



Computing Intent

All pupils at Bolton Brow Primary Academy 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 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, and design and technology, and provides insights into both natural and artificial systems. At Bolton Brow Primary Academy, the core of computing is Computer Science in which pupils are introduced to a wide range of technology, including laptops, iPads, Chromebooks 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 and as active participants in a digital world.

We teach a curriculum that enables children to become effective users of technology who can:

- 1. Understand and apply the essential principles and concepts of computer science, including logic, algorithms and data representation;
- 2. Analyse problems in computational term, and have repeated practical experience of writing computer programs in order to solve such problems;
- 3. Evaluate and apply information technology analytically to solve problems;
- 4. Communicate ideas well by utilising appliances and devices throughout all areas of the curriculum.

Internet Safety

Bolton Brow Primary Academy 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 each half term and children understand how to stay safe when using technology.

Implementation

At Bolton Brow Primary Academy, computing is taught in discreet computing lessons and when possible cross curricular. The computing curriculum is delivered through the Bradford Innovation Scheme of work. Every lesson in our scheme has been individually planned so that it can be effectively taught using the infrastructure we have in place at school and so that it can meet the needs of all our pupils. The scheme has been linked to the 2014 National Curriculum attainment targets in order to ensure progression and coverage. Having discreet lessons means that the children are able to develop depth in their knowledge and skills over the duration of each of their computing topics. Where appropriate, meaningful links will be made between the computing curriculum at the wider curriculum. In computing lessons the children will use either the IPads, Chromebooks or the computer suite in order to access a range of apps and software. Discreet computing lessons will focus on the curriculum skills of information technology, digital literacy and computer science. Children's progress will be assessed using the assessment tool designed by the Bradford Innovation Centre.

Impact

Our approach to the curriculum results in a fun, engaging, and high-quality computing education. The quality of children's learning is evident on the school server and Google Drive. Evidence such as this is used to feed into teachers' future planning, and as a topic-based approach continues to be developed, teachers are able to revisit misconceptions and knowledge gaps in computing when teaching other curriculum areas. This supports varied paces of learning and ensures all pupils make good progress.

Much of the subject-specific knowledge developed in our discreet computing lessons equip pupils with experiences which will benefit them in secondary school, further education and future workplaces. From research methods, use of presentation and creative tools and critical thinking, computing at Bolton Brow Primary Academy gives children the building blocks that enable them to pursue a wide range of interests and vocations in the next stage of their lives.