Gosforth C of E Primary School Curriculum Statement for Computing

Intent

Technology is changing the lives of everyone. Through teaching computing, we equip our children to participate in a rapidly changing world where lives are increasingly transformed by technology.

It is our intention to enable children to find, explore, analyse, exchange and present information. We have access to a range of technology to helps to ensure children 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 an active participant in a digital world.

We want the use of technology to support learning across the entire curriculum and to ensure that our curriculum is accessible to every child. We endeavour to provide opportunities for computing in each area of the curriculum.

We prepare our children to stay safe online through the use of e-safety awareness sessions taught throughout the year and to highlight key areas in safer internet days.

Aims

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, can think analytically to solve problems.
- Are responsible, competent, confident and creative users of information and communication technology.

Implementation

At Gosforth, computing is taught using a blocked curriculum approach. This ensures children are able to develop depth in their knowledge and skills over the duration of each of their computing topics and as they progress through school. Teachers use the New Wessex Planning from ELIM as a starting point for the planning of their computing lessons. This a clear and effective scheme of work that provides coverage in line with the national curriculum. Children have access to iPads, desktop computers, micro bits and interactive whiteboards. All year groups have the opportunity to use a range of devices and programs for many purposes across the wider curriculum, as well as in discrete computing lessons.

Employing cross-curricular links motivates pupils and supports them to make connections and remember the steps they have been taught. The implementation of the curriculum also ensures a balanced coverage of Programming, E-safety, Technology in our Lives and Multimedia. The children will have experiences of all four strands in each year group, but the subject knowledge

imparted becomes increasingly specific and in depth, with more complex skills being taught, thus ensuring that learning is built upon. For example, children in Key Stage 1 learn what algorithms are, which leads them to the design stage of programming in Key Stage 2, where they design, write and debug programs, explaining the thinking behind their algorithms.

Impact

Children will be confident users of technology, able to use it to accomplish a wide variety of goals, both at home and in school.

Children will have a secure and comprehensive knowledge of the implications of technology and digital systems. This is important in a society where technologies and trends are rapidly evolving.