Computing Vision Statement

At Alexandra Park Primary School, we provide our children with a high-quality computing education that equips pupils to use computational thinking and creativity to understand and change the world. Teaching of computing will include computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils will be equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Care

Pupils are encouraged to care about the people around them. Through the Computing unit *Digital Literacy*, children explore topics such as online safety, technology outside school, safe and effective searching and email skills. All of these units require a sense of responsibility and careful use of the growing range of technologies available to young people today.

Aspire

Our Computing curriculum prepares our pupils for their futures where computing will be a fundamental part of day to day life. Children will gain an understanding of how computers work and how they will play a part in their future employment and enable them to become both digitally literate and resilient.

Achieve

Our Computing curriculum ensures that children achieve a balance of knowledge and key skills in each unit of study. The scheme of work has been designed so that each year builds upon the previous years, ensuring connections are made throughout the children's learning. Teachers ensure that children are supported through scaffolding and challenge ensuring that all pupils can achieve in every lesson.

Intent

The computing curriculum at Alexandra Park Primary aims to foster curiosity about computational thinking and develop creative skills to understand and change the world. It aims to ensure all children gain an understanding of the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation. Children will develop skills to analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems. They will evaluate and apply information technology analytically to solve problems. At Alexandra Park Primary the computing program of study will lead to children becoming responsible, competent, confident and creative users of information and communication technology.

Implementation

At Alexandra Park we implement a Computing curriculum that is progressive throughout the school. It is challenging, inspiring and fun. It supports our children to develop their knowledge, ability to apply and understanding of the matters, skills and processes involved in **computer science**, **information technology** and **digital literacy**. The school's curriculum design reflects our core values of Care, Aspire and Achieve. Our Computing curriculum ensures that we cover these core values as well as the key skills and knowledge set out in the National Curriculum. Our Learning Behaviours of Pride, Determination, Curiosity, Creativity, Independence and Collaboration are woven into the Computing units of work.

Effective questioning is a crucial component of all our lessons. Key questions are planned to encourage children to think about their learning, to reflect upon previous learning and to make connections between new and existing learning. We encourage adults and children to use both rich language and precise vocabulary linked to the subject area that they are studying so that they can understand it and can then use it to reason, articulate and make generalisations.

Impact

Evidence through pupil voice and outcomes in saved work will show that children can articulate and demonstrate their knowledge and understanding of programs and algorithms; the purposeful uses of technology; the services computer networks can provide and the vital importance of using any and all technology safely and responsibly.

Children will be able to use logical reasoning to predict the behaviour of simple programs and explain how some simple algorithms work. They will be able to detect and correct errors in algorithms and programs.

Children will be able to talk about how to use technology purposefully to create digital content. They will be able to combine a variety of software to design and create programs, systems and content that accomplish given goals. They will understand computer networks including the internet; how they can provide multiple services and the opportunities they offer for communication and collaboration.

Children will have an understanding and respect for the common uses of information technology beyond school. They will understand it is their responsibility to use technology safely and respectfully and also be able to identify where to go for help and support when they have concerns about online technologies.