Valley End Computing Curriculum Overview

Intent

At Valley End Infant School, we believe that all children need to have very good computing skills if they are to succeed throughout their education and in the workplace in future years. We aim to give pupils high quality, enjoyable and memorable learning experiences through access to a range of digital and electronic software and hardware.

We recognise that the world of technology is fast changing. Therefore computing education needs to progress appropriately, in order that children move forward with the skills and knowledge necessary to be active participants in today's, and the future's, digital world. We also understand that many of our Early Years children begin school with age-appropriate technology skills, so whilst technology is used appropriately in the Early Years, there is a greater focus on speaking and listening skills than on technology.

At Valley End we aim for pupils to have a foundational understanding of computing to include algorithms, simple programs, logical reasoning and prediction. We also aim for pupils to purposefully and creatively store, manipulate and retrieve digital content as well as recognising how technology is used across the wider world. Our intention is that pupils will also be able to use their computing skills across the curriculum and to inform and enhance life-long learning.

We recognise that young children need a strong, but age-appropriate, understanding of how to keep safe when using modern computing technology and the internet. This will then allow pupils to feel protected, well-informed and able to self-regulate when using technology and the internet and all it has to offer.

Implementation

Key Stage 1 children follow the NCCE, Teach Computing scheme of work.

In order to teach Computing, the school is equipped with a range of resources, software and hardware. Each class has two computers, enabling computer access at a variety of levels, for small group work, independent access or through whole class teaching sessions.

There is a wide range of software suitable for young children, which aims to develop a broad range of computing skills and to support learning in other areas of the curriculum. Children are also given opportunities to use various forms of hardware to support learning, such as digital cameras, sound recorders and programmable toys. Every classroom is equipped with an interactive whiteboard and sound system, and mobile tablets are increasingly being used to support teaching, learning and assessments.

We have a networked computer suite that houses sixteen computers and an interactive whiteboard. The suite is timetabled effectively throughout the week and across all year groups in order to help support learning across the curriculum, as well as providing the opportunity for teachers to teach specific computing skills. Computing, and its related skills, are taught as a discrete subject and through meaningful cross-curricular links.

Each child has their own computing folder, available through the networked system, on any computer within the school. These folders are set up in Early Years and move with the children, onto their next year group, when appropriate. Children in Year 1 and 2 are taught how to save to their individual file, retrieve and edit their previous work, when required.

One of the most important aspects that we teach is Digital Literacy. We want our pupils to use technology safely and respectfully, to recognise the fantastic opportunities that the online world can bring but also to recognise the implications of this. Throughout the curriculum, children are taught about how to keep themselves safe when using technology and the internet and build a strong awareness of potential risks at an age-appropriate level. Children also learn strategies, what to do and who to talk to should they feel

uncomfortable about something that they come across on a computing device or when using the internet. Furthermore, the school has a strong and effective internet filtering system that is regularly monitored by the Adminstration Officer, Headteacher and Safeguarding Governor.

Impact

By the end of each academic year, the majority of pupils have learnt to use and manipulate computing skills, hardware and software appropriate for their age and stage of education. Pupils' understanding of computing progresses quickly through each year and pupils gain a confident understanding of how to keep safe when using the internet, digital devices and software. The teaching and learning of Computing at Valley End therefore equips children for the next steps of their digital education and continues to enhance learning across the curriculum.

Curriculum Map

	EYFS	Year 1	Year 2
Autumn 1	Exploring technology. Using a computer. Using programmable toys. Using interactive whiteboard.	Technology all around us	Computing Systems and networks
Autumn 2		Digital Painting	Taking Photographs
Spring 1		Digital Writing	Making Music
Spring 2		Grouping Data	Data and Pictograms
Summer 1		Moving a robot	Robot Algorithms
Summer 2		Programming Animations	Introduction to Quizzes