Computer Curriculum Statement

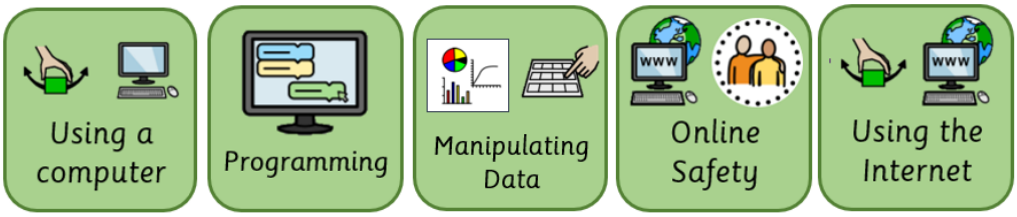
"A computer is like a violin. You can imagine it playing beautiful music, but you have to learn how to play it." Bill Gates

Our children are living in a world surrounded by devices, and technology is changing the lives of everyone. Computing within our school can therefore provide a wealth of learning opportunities and transferrable skills within the Computing lessons and across other curriculum subjects. Through the study of Computing, our children at Vallis First School will obtain a broad range of computing skills through a variety of digital experiences.

Intent

At Vallis, we follow the ***Teach Computing*** scheme of work. By doing so, we hope to raise the profile of Computing within our school and develop a lifelong passion for Computing. Children use a range of technology confidently, safely and responsibly at Vallis to ensure that our children will go into the world digitally literate and prepared for society and employment.

Implementation



At Vallis we enable children to understand and apply concepts of computing through the following four main areas: programming; technology around us; creating digital media; and data and information. These areas also run alongside online safety with a holistic approach. As well as this, computing is also linked with other areas of the curriculum and is embedded throughout the school.

Our Computing curriculum is taught in an engaging and inclusive way and follows a mixed age rolling program. We use the 'Teach Computing' scheme of learning that provides coverage that is in line with the National Curriculum.

Computing at Vallis begins in our Early Years Foundation Stage, with practical exploration through child initiated play where we provide many opportunities for children to use technology to solve problems and produce creative outcomes through the identification of children's interest and development needs. Alongside this, children are taught how to use technology safely and follow our 'Golden Rules' when using technology.

In Key Stage 1 and 2, we have adapted the Department for Education's 'Teach Computing Curriculum (https://teachcomputing.org/) to reflect our mixed age class structure and need for a two-year rolling computing curriculum.

Our, teacher's use the 'Teach Computing' lesson plans to inform their computing planning and meet the needs of the pupils in their class. Lessons have clear learning objectives and key vocabulary is identified. Every lesson includes formative assessment and summative assessment opportunities are built in across the year.

The general approach to implementing the computing curriculum content for mixed year groups is to teach units for the lower year group in the first three teaching blocks, and units for the higher year group in the last teaching blocks. There are some dependencies between units and where there is a possibility of these units not being taught in order, they have been noted and mitigations have been devised within medium term plans.

A benefit of this approach is that both Computing Systems and Networks unit will be taught in one cycle, and both Data and Information units will be taught in the other.

Within the units taught, there are dependencies between units in consecutive years of these strands. By teaching both units of each strand in a single cycle, it removes the possibility of some children being taught those units in the incorrect order. The compromise is that each strand will only be taught every other cycle. Lessons are taught in weekly sessions or blocked together, dependent on the unit covered. A wide range of technology supports the teaching of computing and children have access to these devices to use and present other areas of the curriculum.

Digital Literacy and Online Safety

A key part of the computing curriculum is ensuring that children are accessing technology safely and responsibly. Children have a right to access safe online spaces and to benefit from all the opportunities that a connected world can bring them, appropriate to their age and stage.

Children at Vallis First school develop this awareness and responsibility using the 'Project Evolve – Education for a Connected World' framework. The framework aims to support and broaden the provision of online safety education, so that it is empowering, builds confidence and creates a positive online environment.

Impact

Teachers will deliver a high-quality computing curriculum for pupils that is well planned and demonstrates a clear progression of knowledge, skills and understanding across the year groups.

By the end of their time at Vallis, children will:

- use computational thinking and creativity to understand and change the world;
- think and work creatively, analytically and solve problems;
- be digitally literate;
- have the confidence to use a range of software and the internet to enhance their learning across all areas of the curriculum;
- understand how to use technology safely and appropriately.

Subject Lead: Tracey Messenger

Curriculum Lead: Tracey Messenger