Summerhill Infant School
Computing

Intent

Inspiring, nurturing and supporting each child, every day to develop citizens for the future.
Our School lays the foundation for a lifetime love of learning.

At Summerhill Infant School we believe a high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing is a significant part of everyone's daily life and we believe that children should be at the forefront of new technology. We believe that, as an essential part of the curriculum, computing is a subject that not only stands alone but should be an integral part of all learning. We strive to provide a relevant, challenging and enjoyable curriculum for all pupils, as well as using it as a tool to enhance learning throughout the wider curriculum.

In addition, we firmly believe in the importance of delivering a high quality E-Safety curriculum alongside the core values of computer science, information technology and digital literacy. As technology develops, so does the need for a better understanding of how to use it in a responsible manner. The education of pupils in E-Safety is therefore essential to ensure children are equipped with the skills to recognise risks online, to be critically aware of the materials and content they access online and have a good understanding of what to do if they ever feel worried or unsure when using technology.

Implementation

E-safety

All year groups are taught a discreet E-Safety lesson each term. They also participate in E-Safety assemblies and Safer Internet Day.

These sessions allow them to discuss and understand the importance of staying safe online and what they should do if they find themselves in unsafe or worrying situations. The initial message of T.A.G (Tell a Grown Up) is taught in Reception and is built upon throughout KS1 in circle time discussion. Teachers show a range of relevant videos, songs and books which all encourage pupils to explore issues that may arise when sharing content online, playing games online and chatting to others online.

EYFS (Reception)
At Summerhill Infant School we believe that Computational Thinking is at the heart of the computing curriculum and children will only be ready for this subject if we provide them with foundational experiences. Therefore, in the EYFS we follow an unplugged BAREFOOT approach. This is centred around using 'Computational Thinking' as a set of problem solving skills that pupils will be using in their every day lives. These skills include tinkering, creating, collaboration, persevering, using logic to anticipate and explain their reasoning, grouping objects and creating algorithms by responding to instructions or breaking down problems into small steps.

Alongside the unplugged approach, pupils will also explore and tinker with a range of technology around them to begin to understand and make use of the evolving world of technology around them.

Key Stage 1 (Year 1 & 2)

In KS1 we follow the Teach Computing Curriculum. The units are based on a spiral curriculum. This means that each of the themes is revisited regularly (at least once in each year group), and pupils revisit each theme through a new unit that consolidates and builds on prior learning within that theme. This style of curriculum design reduces the amount of knowledge lost through forgetting, as topics are revisited in year 1 and 2. The Curriculum has been written to support all pupils. Each lesson is sequenced so that it builds on the learning from the previous lesson, and where appropriate, activities are scaffolded so that all pupils can succeed and thrive. Scaffolded activities provide pupils with extra resources, such as visual prompts, to reach the same learning goals as the rest of the class. Exploratory tasks foster a deeper understanding of a concept, encouraging pupils to apply their learning in different contexts and make connections with other learning experiences. Each of the units are linked to key themes. These can be categorised as:

- Programming – Pupils are taught the principles of programming in order to design, create and debug algorithms, using events to trigger their sequences of code.

- Computing Systems – Pupils are equipped to recognise technology in the world around them and learn how its responsible use improves our world in school and beyond.

- Data and information—Pupils explore objects and labels before collecting, organising and presenting a range of data on a computer.

- Creating Media – Pupils are taught to use, access and express oneself through digital technology, including creating digital writing and digital music.

Impact

Our broad and balanced curriculum responds to the needs of the changing world and the needs of our learners. Our school is equipped with technology that enables children of all abilities, backgrounds and needs to learn and progress. We have built a curriculum that ensures that our pupils will

- Understand the importance that computing will have going forwards in their education and working lives and in their personal and social futures.
- Understand that technology helps to showcase their ideas and creativity. They will know that different technology can help them achieve a wide range of artistic and practical aims.
- Be able to use technology individually and a part of a collaborative team
- Show a clear progression of skills across all areas of the National curriculum
- Be aware of online safety issues and understand what how to deal with any issues that may arise.
- Have an awareness of developments in technology and have an idea of how current technologies relate to one another.
- Meet the end of Key Stage expectations and feel ready to continue their path in their computing curriculum