Computing Intent, Implementation and Impact

INTENT

In Computing our paramount intent is to equip our pupils use technology responsibly, respectfully and safely. We want pupils to think logically, solve problems, develop creativity and make links between the skills developed across the curriculum, but particularly in mathematics, science and design and technology. Pupils will develop an understanding of how digital systems work and how to put this knowledge to use through programming, so that they can create programs, systems and a range of content. They will gain an understanding of how they will use these skills in the future workplace, as active participants in a digital world.

Through our Computing curriculum, we aim to instil a sense of enjoyment around using technology and to develop pupil's appreciation of its capabilities and the opportunities technology offers to, create, manage, organise, and collaborate. Tinkering with software and programs forms a part of the ethos of the scheme as we want to develop pupils' confidence when encountering new technology, which is a vital skill in the ever evolving and changing landscape of technology. Through our curriculum, we intend for pupils not only to be digitally competent and have a range of transferable skills at a suitable level for the future workplace, but also to be responsible online citizens.

Our Computing curriculum enables pupils to meet the end of Key Stage Attainment targets outlined in the National curriculum and the aims align with those in the National curriculum.

IMPLEMENTATION

Our Computing curriculum is supported by the Kapow scheme of learning. Computing is taught in blocks throughout the year so that children achieve depth in their learning, on a 2 year cycle for both KS1 and KS2. Progression documents for each unit clarify the key knowledge, skills and vocabulary that each age group should be using.

The Kapow Primary scheme of work is designed with three strands which run throughout:

- Computer science
- Information technology
- Digital literacy

The Kapow Primary scheme is organised into five key areas, creating a cyclical route through which pupils can develop their computing knowledge and skills by revisiting and building on previous learning:

- Computer systems and networks
- Programming
- Creating media
- Data handling
- Online safety

The implementation of Kapow Primary Computing ensures a broad and balanced coverage of the National curriculum requirements, and our 'Skills showcase' units provide pupils with the opportunity to learn and apply transferable skills. Where meaningful, units have been created to link to other subjects such as science, art, and music to enable the development of further transferable skills and genuine cross- curricular learning.

Lessons incorporate a range of teaching strategies from independent tasks, paired and group work as well as unplugged and digital activities. This variety means that lessons are engaging and appeal to those with a variety of learning styles. Differentiated guidance is available for every lesson to ensure that lessons can be accessed by all pupils and opportunities to stretch pupils' learning are available when required. Knowledge organisers for each unit support pupils in building a foundation of factual knowledge by encouraging recall of key facts and vocabulary.

IMPACT

Through the study of computing at Southrop, pupils should leave school equipped with a range of skills to enable them to succeed in their secondary education and be active participants in the ever-increasing digital world.

The expected impact of following the Kapow Computing scheme of work is that children will:

- Be critical thinkers and able to understand how to make informed and appropriate digital choices in the future.
- Understand the importance that computing will have going forward in both their educational and working life and in their social and personal futures.
- Understand how to balance time spent on technology and time spent away from it in a healthy and appropriate manner.
- Understand that technology helps to showcase their ideas and creativity. They will know that different types of software and hardware can help them achieve a broad variety of artistic and practical aims.
- Show a clear progression of technical skills across all areas of the National curriculum - computer science, information technology and digital literacy.
- Be able to use technology both individually and as part of a collaborative team.
- Be aware of online safety issues and protocols and be able to deal with any problems in a responsible and appropriate manner.

- Meet the end of key stage expectations outlined in the National curriculum for Computing.
- Have an awareness of developments in technology and have an idea of how current technologies work and relate to one another.

In order to monitor pupil progress at the end of each unit, class teachers will use evidence from folders and work saved on the system or any apps, as well as any assessment tasks to assess each pupil against the relevant knowledge, skills and vocabulary for their age group. This will allow teachers to identify any gaps in learning and work to rectify these.