

Computing 3I's **(Intent, Implementation & Impact)**

Intent

All pupils have the right to have rich, deep learning experiences that balance all the aspects of computing. With technology playing such a significant role in society today, we believe 'Computational thinking' is a skill children must be taught if they are to be able to participate effectively and safely in this digital world.

A high-quality computing education equips pupils to use creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems.

In Computing lessons, pupils are introduced to a wide range of technology, including laptops, tablets and interactive whiteboards, allowing them to continually practice and improve the skills they learn. This ensures they become digitally literate so that they are able to express themselves and develop their ideas through information and computer technology and at a level suitable for the future workplace and as active participants in a digital world.

We teach a curriculum that enables children to become effective users of technology who can:

- Understand and apply the essential principles and concepts of Computer Science, including logic, algorithms and data representation;
- Analyse problems in computational term, and have repeated practical experience of writing computer programs in order to solve such problems;
- Evaluate and apply information technology analytically to solve problems;
- Communicate ideas well by utilising appliances and devices throughout all areas of the curriculum.

Internet Safety

We take internet safety extremely seriously. We have an E- Safety Policy that provides guidance for teachers , children and parents about how to use the internet safely. Every year group participates in lessons on e-safety and children understand how to stay safe when using technology.

Implementation:

Teachers plan the following:

- A cycle of lessons for each subject, which carefully plans for progression and depth;
- Challenge questions for pupils to apply their learning in a philosophical/open manner;
- Trips and visiting experts who will enhance the learning experience;

Internet Safety RSHE units (Online Relationships and Internet Safety and Harms) are an integral part of PSHE and Computing lessons.

Impact:

Our Computing curriculum is high quality, well thought out and is planned to demonstrate progression. If children are keeping up with the curriculum, they are deemed to be making good or better progress. In addition, we measure the impact of our curriculum through the following methods:

- A reflection on standards achieved against the planned outcomes
- Children can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation;
- Children can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems;
- Children can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems;
- Children are responsible, competent, confident and creative users of information and communication technology.
- A celebration of learning for each term which demonstrates progression across the school;
- Pupil discussions about their learning;

SMSC Links

Spiritual

- Use the internet as a gateway to big life issues.
- Promote self-esteem through opportunities to present their work to others.
- Consider how we can connect with others through the world wide web.
- Understand the advantages and limitations of ICT.

Moral

- Use online safety lessons to explore the moral issues surrounding the use of data, social media and online safety.
- Create an awareness of encouraging respect for and developing a tolerance of people's views and opinions.
- Consider the benefits and potential dangers of the internet.
- Discuss the moral implications of cyberbullying.

Social

- Use digital media services to link with other schools and communities.
- Highlight ways to keep safe when online, especially using social media.
- Encourage collaborative learning through paired activities.
- Discuss the impact of ICT on the ways people communicate e.g. Skype/Zoom.

Cultural

- Develop a sense of awe and wonder at human ingenuity.
- Develop an awareness of their audience when communicating in a digital world.

British Values Links

We understand the importance of promoting the fundamental British Values that are recognised around the world. It is our aim as a school to address these values wherever possible in the curriculum, including in computing.

Computing is becoming an increasingly vital part of the curriculum as it is an integral part of modern daily life. Wherever possible we find it important to immerse the children in these values which are important to our identity. Children can do this through research on the internet.

We educate children on online safety and have this as a basis when using the tablets in school. The children engage in regular online safety lessons to continually update their knowledge and understanding of staying safe linked to current affairs.

Our Long Term Plan and curriculum coverage can be found on our website: <https://www.southstokeschool.org/learning>.

Class planning:

Caterpillars: <https://www.southstokeschool.org/class-1-curriculum>

Butterflies: <https://www.southstokeschool.org/class-2-curriculum>