Sprowston Junior School
Our Curriculum

Subject: Computing

Date policy was updated:	Monitored by:	Date of policy review:
September 2022	Matt Walton	September 2022

This policy can be summarised using the three categories: intent, implementation and impact. These areas are used to monitor the effectiveness of our computing curriculum across the school.

Intent:

- To enable children to become safe users of computers and tablets, especially when using the internet.
- To develop the necessary skills to become able and confident users of computers
- Understand and apply the essential principles and concepts of Computer Science, including logic, algorithms and data representation.
- Evaluate and apply information technology analytically to solve problems.
- To give our children life skills that will enable them to embrace the expanding world of technology which will undoubtedly be a huge part of their futures.
- To develop perseverance to overcome technical issues, and have the confidence to try to overcome them.
- To ensure we have digital literate children

Implementation:

- Teach high quality computing lessons using a variety of devices such as desktop computers, chrome books and tablets.
- Computing skills are taught both in computing lessons discretely with cross curricular links supporting other areas of learning across the school.
- We use the 'Kapow' scheme for the majority of our computing lessons. The 'Kapow'' scheme covers the objectives of the national curriculum and ensures coverage of the key stage 2 curriculum. We support this with 'Teach Computing' resources where we feel they can supplement and enrich the resourced already being used.
- We often provide extra-curricular opportunities to inspire and push more able pupils to achieve their potential in computing.
- Where appropriate, meaningful cross-curricular links will be made between the computing curriculum and the wider curriculum.

Impact:

- Children are responsible, competent, confident and creative users of information and communication technology.
- Every child will understand the risks and dangers of the internet and will be accomplished and safe users of computers and other devices.
- Children will have the necessary skills to become able and confident users of computers of various forms
- 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 computer programming.
- Children can evaluate and apply information technology, including new or unfamiliar technologies.
- Children will have developed resilience to facing and debugging problems which arise on computers.
- Children are digitally literate and ready for their next steps at aged 11.

Statement:

Computing at Sprowston Junior School aims to inspire children to be creative and computational thinkers. Through the use of digital devices such as computers, laptops and tablets, alongside unplugged lessons in the classroom and around the school, children are taught the fundamental aims of the key stage 2 computing curriculum:

- To understand and apply the concepts of computer science
- To analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- To evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- To be responsible, competent, confident and creative users of information and communication technology

There are numerous opportunities for cross-curricular links to computing across our curriculum. At regular points throughout the week, teachers are encouraged to use the computer suite or tablets to inspire children in other areas of the curriculum, providing a skills-based cross-curricular curriculum.

We believe it is of huge importance for our children to have a deep understanding of the dangers of the internet. We aim to educate our learners to be competent but safe users of the internet.

We have a responsibility to ensure that pupils become digitally literate and capable users of technology to a level suitable for their future workplaces and as active participants in an ever-growing digital world.

<u>Organisation:</u>

Computing is an important cog in our curriculum at Sprowston Junior. We believe that the children should leave junior school with the computing science and digital literacy skills, which will enable them to succeed and have confidence to tackle ever-challenging tasks in key stage 3. We have researched and evaluated many computing schemes and use a combination of Kapow and Teach Computing to meet the needs for an SJS Computing Curriculum.

In year 2, the children have started to develop some digital literacy skills and have a basic grasp of simple coding.

We build on this by covering computing systems and networks, creating media, data handing & programming in all year groups. Skills are progressively developed to ensure each year builds on the previous one and skills showcases are highlighted as progress-checks to see how well the children have been doing.

At SJS, we feel digital literacy is an important element of the National Curriculum which needs an added focus and we add extra lessons from Teach Computing to add depth to their knowledge and understanding where we can.

The Kapow scheme is a spiral curriculum, it revisits concepts, increasing the depth each time and builds on prior knowledge as it does so.

Online safety is the most important element of the computing curriculum at SJS and all year groups study online safety in the autumn term. Children are also reminded regularly in PSHE and in assemblies of the importance of staying safe online and we recognise the national internet safety day.