



Sprowston Junior School Our Curriculum



Subject: Computing

<u>Date policy was updated:</u> September 2019	<u>Monitored by:</u> <u>Stephen Brown</u>	<u>Date of policy review:</u> September 2020
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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 and tablets.
- 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.

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 'iCompute' scheme for the majority of our computing lessons. The 'iCompute' scheme covers the objectives of the national curriculum and ensures coverage of the key stage 2 curriculum.
- 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 and tablets.
- 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.

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.

Organisation:

Each class has one hour timetabled computing lesson each week. For this hour, the class has access to the computer suite where there are 18 desktop computers, and 20 tablets. The majority of computing lessons at Sprowston Junior take place in the computer suite, however there are occasionally lessons which are unplugged and take place in the classrooms. Following research into various schemes of work, we chose the 'iCompute' scheme as we felt it provided us with the framework to deliver a high quality computing curriculum, providing all teaching staff with a wide variety of resources and software ideas to support the outcomes we set out to achieve. The lesson plans included in 'iCompute' provide teaching staff with a clear lesson structure and opportunities to differentiate appropriately to allow each child to access the computing curriculum at Sprowston Junior School. We put

heavy emphasis on internet safety across our curriculum, in SEAL lessons as well as computing lessons. Internet safety lessons throughout the academic year, with the iSafe unit of work being split in to 6 sessions – one at the beginning of each half term. We feel this will ensure children are reminded regularly of the importance of staying safe online. Alongside these regular internet safety lessons, we dedicate a day to internet safety in line with the National Internet Safety day. We believe