



Intent – Computing at St Johns Infant School

Recent research used to inform practice: National Centre for Computing training

Developing computer literate pupils at St Johns:

It is our intention to enable children to develop their digital literacy. We want children to know more, remember more and understand more in computing so that they leave St Johns ready for the next stage of their computing education. Computing skills are a major factor in enabling children to be confident, creative and independent learners and it is our intention that children have every opportunity available to allow them to achieve this. We intend to develop a computing curriculum that provides as many cross curricula opportunities as possible. This will enable pupils to improve, develop and embed the computing skills and knowledge taught through focussed computing lessons. We intend to build a computing curriculum that prepares pupils to live safely in an increasingly digital British society where pupils can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.

We recognise that the world of technology is fast changing. Therefore computing education needs to progress appropriately, in order for children to move forward with their skills and knowledge necessary to be active participants in today's, and the future's, digital world. We also understand that many of our Early Years children begin school with age appropriate technology skills, so whilst technology is used appropriately in the Early Years, there is a greater focus on speaking and listening skills than on technology.

We recognise that young children need a strong, but age appropriate, understanding of how to keep safe when using modern computing technology and the internet. This will then allow

pupils to feel protected, well informed and able to self regulate when using technology and the internet and all it has to offer.

Implementation

Key Stage 1 children follow the NCCE, Teach computing scheme of work.

In order to teach Computing, the school is equipped with a range of resources, software, and hardware. Each KS1 class has a chromebook, enabling computer access at a variety of levels during the day when appropriate.

There is a wide range of software suitable for young children, which aims to develop a broad range of computing skills and to support learning in other areas of the curriculum. Children are also given opportunities to use various forms of hardware to support learning such as iPads and programmable toys. Every classroom is equipped with an Interactive Whiteboard and sound system as well as a class iPad. A set of iPads centrally stored are increasingly being used to support teaching and learning.

We have a trolley with 15 Chromebooks that is timetabled effectively in order to help support learning across the curriculum, as well as providing the opportunity for teachers to teach specific computing skills. Computing, and its related skills are taught as a discrete subject and through meaningful-cross curricular links.

Each class has their own computing folder, available through the networked system, on any computer within the school via Google Drive. Children in year 1 and 2 are taught how to save to their individual class file, retrieve and also edit their previous work, when required.

One of the most important aspects that we teach is digital literacy. We want our pupils to use technology safely and respectfully, to recognise the fantastic opportunities that the online world can bring but also to recognise the implications of this. Throughout the curriculum, children are taught about how to keep themselves safe when using technology and the internet and build a strong awareness of potential risks at an age appropriate level. These are not just limited to computing lessons, but have a strong cross curricular link. Children also learn strategies, what to do and who to talk to should they feel uncomfortable about something that they have come across on a computing device or when using the internet. Furthermore, the school has a strong and effective internet filtering system that is regularly monitored by Computing Cubed, the Head Teacher and the Safeguarding Governor.

Impact

By the end of each academic year, the majority of pupils have learnt to use and manipulate computing skills, hardware and software appropriate for their age and stage of education. Pupils' understanding of computing progresses quickly through each year and pupils gain a confident understanding of how to keep safe when using the internet, digital devices and software. The teaching and learning of computing at St John's therefore equips children for the next steps of their digital education and continues to enhance learning across the curriculum.

Curriculum Map

(Software/Hardware needed for each topic is written in brackets)

Internet Safety will be taught and revisited throughout each half term

	EYFS	Year 1	Year 2
Autumn 1	Exploring Technology	Technology all around us (Word)	Computing Systems and Networks
Autumn 2	Using a programmable toy	Digital Painting (iPads)	Taking Photographs (iPads/ Pixlr.com)
Spring 1	Using Age Appropriate APPs on the iPads	Digital Writing (Word)	Making Music (Chrome Music Lab)
Spring 2	Using Interactive Whiteboard	Grouping Data (Powerpoint)	Data and Pictograms (J2e website)
Summer 1	Taking photographs	Moving a Robot (Beebots/ IPADS)	Robot Algorithms (Beebots/ IPADS)
Summer 2		Programming Animations (Scratch Junior)	Introduction to Quizzes (Scratch Junior) (Plickers)

The school supports the International Safer Internet Day each February and provides opportunities for pupils to consider cyberbullying as part of Anti-Bullying week in the autumn term.

St John's C of E Infants School

At St Johns, our aim is to implement this INTENT through quality first Teaching & Learning. A simple overview of the learning that will take place at St Johns.

Nursery	<ul style="list-style-type: none">● Operate simple ICT equipment (CD Players, basic skills)● Cause & effect toys - simple mechanisms: remotes, winders, friction cars● Press parts, lift flaps● Interact with age appropriate software● Use remote control cars
Reception	<ul style="list-style-type: none">● Internet safety● Complete a simple program● Use iPads and a range of technology● Use BeeBots (simple coding)
Year 1	<ul style="list-style-type: none">● Name a variety of technology in school and beyond● Learn how to keep safe by understanding what is safe and what is not safe and who to go to for help● Understand what personal information is and why I need to keep it private● Understand what an algorithm is● Put a set of codes into a digital device● Debug simple programs● Log on and log of

St John's C of E Infants School

	<ul style="list-style-type: none">● Create a piece of work using simple programs
Year 2	<ul style="list-style-type: none">● Internet safety● Use the Internet to find out information linked to their learning● Create a piece of work using a program - chrome Music Lab/ Pixlr● Use technology to save & retrieve work● Put a set of instructions into a device - BeeBots● Make predictions on the behaviour of simple programmes● Put a set of codes into a device● Debug programmes● Learn about algorithms