



South Gosforth First School Computing - Subject Overview

'The computer was born to solve problems that did not exist before' – Bill Gates

Computing at South Gosforth First School

At South Gosforth First School, our Computing curriculum aims to inspire pupils to become innovative and creative thinkers with a strong appreciation for the digital world. We strive to develop pupils' confidence to take risks by drafting concepts, modelling, and testing their ideas, fostering reflective learners who evaluate their work and that of others.

Through our ambitious and progressive sequence of learning, we aim to build awareness of the impact of computing on our lives and encourage pupils to become resourceful, enterprising citizens with the skills to contribute to future technological advancements. Our Computing curriculum is carefully considered, rigorous and challenging and it reflects the latest developments in this vast and constantly changing technological landscape. Our curriculum also makes explicit and meaningful links with other subjects such as mathematics and PSHE, supporting our pupils' learning in these areas.

Our Computing curriculum is designed to equip pupils with essential digital literacy skills, ensuring they become confident and responsible users of technology. A core component of our curriculum focuses on internet safety, teaching pupils how to navigate the online world safely and responsibly. By integrating key aspects of the PSHE curriculum, we provide a holistic approach to personal development and wellbeing. Pupils learn about cyberbullying, privacy, online behaviour, and the importance of digital footprints, fostering a strong understanding of their rights and responsibilities online.

Our aim is to empower pupils to make informed decisions and become positive digital citizens, equipped to thrive in an increasingly digital society.

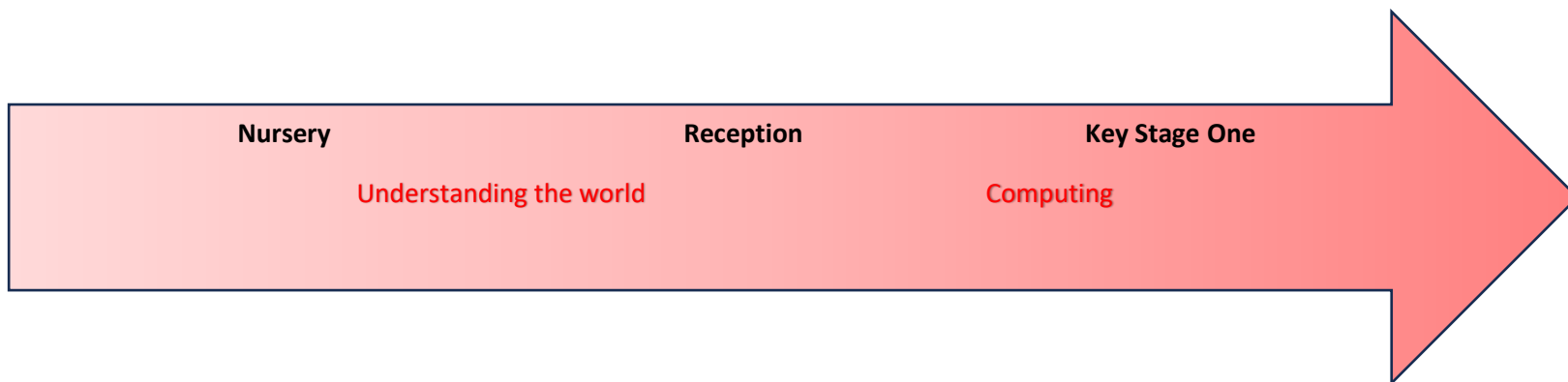
Intent			
How our key drivers are lived through our Computing curriculum			
Character	Culture	Creativity	Challenge
Demonstrate a responsibility to use technology safely. Work collaboratively to develop communication and team work. Understand how to be responsible digital citizens.	Appreciate a range of innovators and the value of technological advancements in the world around them. Understand how technology will be important to future learning and careers.	Think creatively and critically when designing and developing digital solutions, using a range of software. Think creatively to solve problems in various contexts both unplugged and digitally.	Develop strong foundational knowledge of how computers and their systems work. Gain proficiency in a range of digital skills, confidently using different tools and technologies with increasing independence.



Implementation

Early Years

Understanding the World is one of the four specific areas of the Early Years Foundation Stage. The specific areas include essential skills and knowledge. They grow out of the prime areas and provide important contexts for learning. By encouraging children to experiment and to explore various digital tools, we are supporting their learning and understanding of how technology is used in every-day life.



Through the long term plan themes, adult interactions, continuous provision and enhancements in the classroom our children will:

Nursery	Reception
• Become familiar with a range of digital tools, including hand held technology. • Explore mechanical toys such as old typewriters or toys containing simple wind up mechanisms or motors. • Use technology to watch video clips or listen to music	• Become familiar with a range of digital tools such as ipads, laptops, handheld technology, interactive whiteboards • Gain confidence in using simple programmable devices • Engage in age appropriate software and applications to develop foundational digital literacy skills. • Take a photo using an ipad • Familiarisation of a keyboard – type name

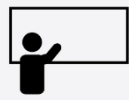


Year 1- 4						
	Digital Presentation and Media		Data and Systems	Programming		
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Technology all around us (NCCE) Digital Presentation and media		Digital Painting (NCCE) Digital Presentation and media	Text and Image (ilearn2) Digital Presentation and media	Move a robot (NCCE) Programming	Programming Code.org course A Programming
Year 2	Scratch Jnr (NCCE) Programming	E-book creation (Book creator) Digital Presentation and media	Digital Photography (NCCE) Digital Presentation and media	Programming Code.org Course C Programming	Pictograms (NCCE) Data and Systems	Making music (NCCE) Digital Presentation and media
Year 3	E-book creation (Book creator) Digital Presentation and media	Stop frame animation (NCCE) Digital Presentation and media	Desktop publishing (NCCE) Digital Presentation and media	Scratch Sequencing Sounds (NCCE) Programming	Branching databases (NCCE) Data and Systems	Programming (Code.org Course D) Programming
Year 4	Programming Code.org course E Programming	E-book creation (Book creator) Digital Presentation and media	3D Design (ilearn2) Digital Presentation and media	Photo Editing (NCCE) Digital Presentation and media	Scratch Repetition in games (NCCE) Programming	Micro:bits (micro:bit.org) Programming



Learning Links Across the Curriculum				
	PSHE	English	Art	Other
Year 1	Knowing how to get help from a trusted adult Knowing rules to keep safe when using technology in and out of the house Making simple decision about safe websites or apps.	Sequence instructions using specific commands Using clear and concise language with subject specific vocabulary	Using drawing, painting and sculpture to share ideas, experiences and imagination. Creating digital pictures	PE: following instructions in a game DT: planning and making products, exploring how things work Maths: sequence events in chronological order using language, describe position and direction and movement including whole, half and quarter turns.
Year 2	Learning about kind communication and how to be a good digital friend. Exploring how technology can affect emotions (e.g. screen time, online games).	Creating instructions using clear step by step language	Using drawing, painting and sculpture to share ideas, experiences and imagination. Using technology to present art	DT: planning and making products, exploring how things work, amending and fixing things in a design when they don't work the first time. Maths: sequence events in chronological order using language, describe position and direction and movement including whole, half and quarter turns. interpret and construct simple pictograms, tally charts, block diagrams and simple tables
Year 3	Knowing how to keep personal information safe Learning respectful digital communication	Draft and write narratives, creating settings, characters and plot Proof read for spelling and punctuation errors	Improve their mastery of art and design techniques	DT: apply their understanding of computing to programme and monitor products Maths: to interpret data in many contexts
Year 4	Beginning to identify reliable website and trusted information	Draft and write narratives, creating settings, characters and plot Proof read for spelling and punctuation errors	Notice small details to incorporate into a drawing Draw a plan view of front elevation	DT: develop design criteria to inform the design of products that are fit for purpose apply their understanding of computing to programme and monitor products



What would a Computing lesson look like at South Gosforth First School?					
					
Clarity of learning exemplified The 'big learning' is explained and the small steps are highlighted. Children know what they are learning, why they are learning it and how it links to previous learning.	Talk like an expert Using technical vocabulary, children express opinions about products and designs.	Retrieval practice There are opportunities for children to explore how previous learning builds on the new learning.	New learning Teachers provide clear explanations of new knowledge. Opportunities to practice specific elements of the making are provided.	Independent work Children apply the new knowledge to an independent piece of design or making.	Assessment for learning and feedback strategies Assessment for learning opportunities are woven in throughout the lesson through careful questioning that makes the pupils think hard. Pupils use self and peer assessments to assess and reflect on their work.

What makes Computing special at South Gosforth First School?		
Year 1	Links developed with Stadler trains Parent workshops for junk modelling.	Science Week Aspirations Week Internet Safety Week
Year 2		
Year 3	STEMazing! Sessions provided (Northern Gas)	
Year 4	STEM engineer workshop (Ford)	



CPD			
Strategy	Who	When	Impact
External expertise	Rachael Blackburn Julian Hughes	Summer term 2025	Time to review the curriculum provision. Replanned several units of work to ensure up to date units of work that are linked to new technology and programmes.
Staff meetings	Rachael Blackburn Paul Crown	Autumn term	Shared new curriculum plans with staff. Staff feel confident in new units and understand the reasoning behind this.
Membership to subject association (NCCE)	All staff	Ongoing	Staff have access to high quality subject knowledge CPD and resources.
GST Subject Leader Networks	Paul Crown	2 sessions throughout the year	Subject leader has access to examples of best practice across the trust. Subject leaders can share planning and resources that can then be disseminated in school. Transition Gateway document created.

Impact	
Strategy	Evidence and Findings
Pupil Voice	Key findings from this monitoring in school can be found on internal school documents and is collated by Paul Crown (Computing Subject Leader) supported by Rachael Blackburn (Deputy Head Teacher). This monitoring informs the current 'Computing Subject Action Plan' which identifies key strengths and areas for development in Computing, as well as actions taken to improve the subject curriculum and delivery across school.
Book Look	
Lesson Observations	
External Reports eg. SIP/Governors	