

Computing

In God's Love We Shine Together

".....We aim to nurture life-long learners, able to pose questions, seek answers, think creatively and rise to a challenge. Through excellent and creative teaching that raises the esteem and ambition of all our pupils, we aim to foster a love of learning and enjoyment and enthusiasm for life.....

Each will be encouraged, challenged and inspired to fulfil his or her potential and play his or her own unique part in God's plan..."

From the beginning of their education in EYFS through to KS2, we encourage children to develop their understanding of the world by guiding them 'to make sense of their physical world and their Community through opportunities to explore, observe and find out about people, places, technology and the environment'.

Intent

St Johns aims to provide an environment where technology is integrated into all aspects of school life. We will do this in a way which actively supports and promotes learning, helping all to make links to the wider world, whilst preparing everyone for the challenge of a rapidly developing and changing technological environment. Our vision is to embrace any existing technology available to us continuously evolve with any advances made in new technology in the future so that pupils become digitally literate - able to express themselves and develop their ideas through ICT.

In St Johns, our Computing curriculum aims to allow pupils to:

- Enjoy using information technology and tackle all applications with confidence and a sense of achievement and purpose.
- Develop practical skills in the use of information technology and the ability to apply these skills to the solving of relevant and worthwhile problems.
- Understand the capabilities and limitation of information technology and implications and consequences of its use.
- Use information technology as a tool appropriately across the curriculum to support and enrich their learning.
- Understand the importance of online safety so they are able to work safely and sensibly.

Implementation

Computing in St Johns delivers a clear and effective, cross-curricular scheme of work that provides coverage in line with the National Curriculum. Computing is taught across three strands: Computer science, digital literacy and information technology.

- St Johns uses the National Centre for Computing Education resources as a basis for providing a clear and comprehensive scheme of work in line with the National Curriculum.
- E-safety is developed both through the National Online Safety resources, and through PSHE lessons.
- Children in all year groups are exposed to a range of topics which encourage progression across the key strands of computer science, digital literacy and information technology.
- All children have access to the hardware and software needed to develop knowledge and skills of digital systems and their applications.
- Children have the opportunity to explore and respond to key issues such as digital communication, cyberbullying, online safety, security, plagiarism and social media.
- The importance of online safety is continuously reinforced and shown through displays within the learning environment. Parents are informed when issues relating to online safety arise and further information/support is provided if required.
- Progress is assessed as achieved or not achieved, on an on-going basis using the NCCE 'I can' statements for each area of Computing. This ensures teachers are aware of individual pupil's progress in computer science, information technology and digital literacy.
- Lessons completed are recorded on Seesaw and children are assessed as having achieved or not achieved each unit of work.

Progression across key stages

All learning objectives have been mapped to the National Centre of Computing Education's taxonomy of ten strands, which ensures that units build on each other from one key stage to the next. This approach allows us to use the spiral curriculum approach to progress skills and concepts from one year group to the next.

Children are taught to design, write and debug programs and are able to use their coding skills to make their own interactive stories, games and computer-generated art. Children are faced with more difficult programming challenges as their skillset progresses.

Online Safety is an important part of computing and sessions are taught through the National Online Safety programme throughout the school to ensure that the importance of E-Safety resonates with the children when they use the internet.

Impact

- Most children will reach the end of year expectations in terms of attainment and progress.
- Children will be confident users of technology, able to use it to accomplish a wide variety of goals, both at home and in school.
- Children will have a secure and comprehensive knowledge of the implications of technology and digital systems. This is important in a society where technologies and trends are rapidly evolving.
- Children are able to recognise the dangers that exist from the use of technology and understand how to access online systems safely.
- Children are fully skilled to live in a world where technology is continuously evolving and are able to grasp the relevance and possibilities of emerging technologies, so that they can play a part in this rapidly changing landscape.

We use a number of ways to measure and assess the impact of our intent and implementation. This helps us refine and adapt our planning further, which, in turn, improves the quality of teaching and learning.

We measure the impact of our curriculum through the following methods:

- Termly pupil discussions and interviews with the subject lead
- Termly learning walks taken by the computing lead to gain an accurate picture of the children's understanding and knowledge and to ensure progression and cohesion throughout Years 1-6.
- Teacher voice is obtained formally each year, alongside informal meetings throughout the year.
- Lesson observations and drop-ins on a termly basis by the Computing lead, allow us to ensure our school assessment policy is being followed by computing teachers.
- Knowledge investigators are completed at the start and end of the year to assess progress and the retention of knowledge and understanding.
- Continual formative assessment takes place via questioning and observation to assess pupils' understanding and generate individual and class hotspots (target objectives).