

**QEGSMAT**



**St. John's CE Primary School  
Wetley Rocks**

# **COMPUTING POLICY. 2023**

### ***“Shine like the star you are.”***

*“You are the light of the world. A town built on a hill cannot be hidden.*

*<sup>15</sup> Neither do people light a lamp and put it under a bowl, instead they put it on its stand, and it gives light to everyone in the house. In the same way, let your light shine before others, that they may see your good deeds and glorify your Father in heaven.”*

**Matthew 5:14-16**

### **Our Values**

**Strength:** *have the strength to stand up for what is right. Be a courageous advocate.*

**Hope:** *to be people of hope. Have hope when times are dark and difficult. Keep positive and be resilient – there is light at the end of the tunnel.*

**Individuality:** *embrace and celebrate our differences. God made us all unique and this is a very special thing.*

**Nuture:** *cherish, care for, encourage and protect everything in God’s world - including yourself.*

**Excel:** *fulfil your God given potential; be the best you can be. Shine like the star you are.*

### **Computing Intent.**

At St John’s Primary School all our curriculum subjects are linked to our school vision and values. We want to ensure that are children are prepared for the modern world and develop values that will help them be responsible citizens of the future. With this in mind, we have developed our computing curriculum to not only develop their computing skills, but educate our pupils on how to use technology positively, responsibly and safely. We want our pupils to SHINE

**Strength:** To know how to use technology positively, responsibly and safely. We want to give children the skills and confidence to identify unsafe online behaviour and actions. They need to stand up for what is right and report any actions that could or will lead to discrimination, bullying or harm to themselves or others. Pupils are taught to use, access and express oneself through digital technology, including a critical understanding of technology’s impact on the individual and society, at a level suitable for the future workplace and as active participants in a digital world.

**Hope:** To have resilience not just within computing lessons but all timetabled lessons. To persevere to complete a task and to try all options to complete the work set. By providing the children with a high quality computing education, they will be able to apply their skills in a variety of subjects such as maths, science and D & T. The children will demonstrate resilience by continually practicing their skills and applying them in different areas of the curriculum.

**Individuality:** To demonstrate their own individual flair within the projects we set. The children can communicate their ideas and understanding using, where appropriate, different applications that are available in school. Their depth of understanding may also be demonstrated by the level of information they provide, the complexity of the task they complete or their ability to understand and develop the understanding of their peers.

**Nuture:** The education of pupils in E-Safety is essential so as to ensure children are equipped with the skills to recognise risks online, to be critically aware of the materials and content they access online, along with guidance on how to accurately validate information accessed via the internet. We want to develop children who know how to protect everyone in God’s world.

**Excel:** At St John’s Primary School, our computing curriculum is ambitious and engaging and provides the opportunity for all children, including disadvantaged pupils and those with SEND, to acquire the knowledge and skills to succeed and stay safe in a world that is becoming increasingly reliant on computer technology. To

ensure all pupils excel, teaching and learning will facilitate progression across all key stages within the strands of digital literacy, information technology and computer science.

### **Implementation.**

Every child benefits from a discrete, weekly computing lesson and teachers also provide opportunities for children to access technology in other areas of the curriculum. Our computing curriculum is based on the NCCE Computing units. This scheme is a coherently planned programme by the DfE which fully covers the requirements of the National Curriculum and is sequenced to allow children to build upon their computing knowledge as they progress through each year of school. The lesson plans created by the NCCE have been chosen because they offer fun, creative hands-on activities which challenge misconceptions and break the National Curriculum down into small steps. We find the NCCE scheme to be clear, systematic and easy to teach so it is ideal for all members of staff to follow. It has been designed for teachers from all backgrounds who want to improve their knowledge and teaching practice. The NCCE scheme has also been chosen because it has a clear structure, detailed planning and a well-thought-out journey through learning.

E-Safety is extremely important and we teach the children the E-Safety rules via regular timetabled slots using Project Evolve. Every year, we refresh the SMART computing rules (KS2) and these are displayed in all classrooms. Within EYFS and KS1, the children learn about Smartie the Penguin and Digi Duck. To educate the children further and ensure that they have secure strategies to protect themselves and others, we take part in Safer Internet Day. Over the coming years, we will be introducing parent information days. These will signpost parents to E safety websites where they can learn more about the information and help available to them.

Children will also learn about E Safety, peer pressure and how to take control of their choices through PHSE lessons provided via ENTRUST. The main unit is entitled: ME AND MY SAFETY. This is taught within Year 4, 5 and 6.

### **Impact**

Children will be confident users of technology, able to use it to accomplish a wide variety of goals linked to information technology, computer science and digital literacy 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 will know how to behave online, taking into account their digital footprint and how their actions can have impacts beyond their school or locality. The children will also have the opportunity to investigate and develop key ideas regarding current issues in school or society.

Pupils will learn to showcase, share, celebrate and publish their work to best show the impact of our curriculum. Staff will look for evidence through reviewing pupil's knowledge and skills digitally through tools such as Seesaw and observing learning regularly. This will be cross referenced with our long term plan and progression of skills document.

Children will be able to apply the British values of democracy, tolerance, mutual respect, rule of law and liberty when using digital systems

## National Curriculum aims

The National Curriculum for computing aims to ensure that all pupils:

- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Are responsible, competent, confident and creative users of information and communication technology.

## Our Curriculum

### Long term planning

- The National Curriculum for Computing 2014 provides the long-term planning for computing taught in school.
- The school uses and adapts the National Centre for Computing Education scheme of work and long-term planning outlines which topic will be covered by which year group and at what time of year.
- Long term planning ensures knowledge and skills progression in computer science, digital literacy and information technology.
- Although not specifically mentioned in the new EYFS framework, Nursery and Reception undertake activities linked to computational thinking/Barefoot Computing and we have linked the ELG's to the computing long term plan.
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### Medium term planning

- These schemes provide teachers with examples for computing objectives and include the technical knowledge to be delivered and skills to be developed across all phase groups.
- Years Y1-6 use the National Centre for Computing Education schemes of learning as their medium term planning documents.
- Nursery and Reception will plan from the Early Years Framework using activities such as Barefoot Computing Activities and Project Evolve to introduce online safety. Although computing is not specifically mentioned in the new framework, we believe it is essential to introduce the children to computational thinking and E Safety to ensure that they have skills manage their online behaviour. EYFS planning is based on the medium-term plans and delivered as appropriate to individual children/groups with consideration of where the children are now and what and their next steps.
- Planning of computing is linked to the creative curriculum wherever possible and the National Centre for Computing topics are referenced in the half-termly planning and submitted to the head teacher.
- Within each academic year (KS2) the children undergo SMART learning lessons.
- At the start of each term, the classes will develop a knowledge map using Project Evolve to ensure the children's online safety lessons for that term specifically meet the needs of the class.

## Short term planning

- The above scheme of learning supports individual lesson planning.
- Teachers plan lessons to achieve specific lesson objectives, incorporating teaching methods outlined below.
- Teachers of the EYFS ensure the children learn through a mixture of adult led activities and continuous provision both inside and outside of the classroom.

## Teaching Methods

The emphasis in lessons is to develop an understanding of how computers work, how they can be used as effective tools and how to keep safe whilst using computing technology. Children have the opportunity to work both individually and collaboratively to learn and develop their skills in programming, digital resource creation, electronic communication, research, control and information handling. They will also develop an increasingly broad understanding of technology including hardware, network and the Internet. All work conducted online will be delivered in the context of how to stay safe whilst accessing the World Wide Web.

Within lessons, new subject specific vocabulary is introduced and used consistently and accurately. Each lesson provides opportunities for children to build on prior knowledge and learning. A cross-curricular approach is used wherever possible, linking learning to pupils' interests and establishing real-life contexts for their work.

In KS1 and KS2, the following activities are delivered in sequence to enable creativity based on increasing confidence and competence within IT and Computer Science and Digital Literacy:

- Creation of digital media projects
- Effective communication using computing technology
- Conducting research projects
- Handling Information
- Programming and control
- Understanding technologies

From September 2021 the early learning goal (ELG) in technology was removed from the EYFS statutory framework. Despite its exclusion from the renewed framework, technology undoubtedly has a role to play in early years classrooms, both in preparation for the National Curriculum and within the context of a technologically advanced society.

In EYFS, our children develop computing skills through both adult focussed activities and within the daily continuous provision. Children have access to games and programmes on the Interactive Whiteboards, iPads for individual use of games and painting programmes, and we have a bank of programmable toys (bee-bots) for independent exploration into learning about coding. We also have CD players, cameras and iPads for the children to use in their free play. Adults staffing within our Continuous Provision will show children how to use the resources effectively and encourage them to further increase their knowledge and skills. We also demonstrate how technology is used by encouraging the use of search engines to find out answers to their questions and to watch videos and play music.

## **Special educational needs & disabilities (SEND)**

Computing is taught to, and inclusive of, all children, whatever their ability. Using high quality resources, teachers provide learning opportunities that are matched to the needs of children with learning difficulties and when necessary, take into account the targets set for individual children in their Pupil Passports.

### **Assessment**

- Children in the Foundation Stage are assessed in accordance with the EYFS curriculum.
- Assessment trackers are used in years 1-6. Class teachers collect data, assessing if children are working below, at or above the expected levels linked to the specific statements for each Computing Unit.
- As appropriate, teachers provide support and identify specific next steps in learning for target individuals or groups of learners.
- Marking and responding to feedback– see whole school feedback policy.

### **Monitoring**

The Curriculum leader, alongside SLT, is responsible for monitoring and evaluating curriculum progress. This is done through work scrutiny, planning scrutiny, resource audits and learning walks which involve lesson observation drop-ins, pupil interviews and subject-specific conversations with staff.

Evidence of computing will either be found in the children's topic books or electronic information will be collected via the school network.

### **Learning at Home**

Home learning for school closures and KS1 is set via an online platform called PADLET. Children are able to complete a variety of tasks linked to various programmes that they have encountered in school. Specific homework tasks are set via Atom Learning for KS2. This allows children to complete their learning online, have instant feedback and it also provides parents with an overview of their learning.

### **Role of Subject Leader**

- The subject leader, together with the head teacher, is responsible for monitoring and evaluating the quality of teaching and learning of computing across the school, and ensuring continuity and progression of knowledge and skills through the coverage of the subject.
- The subject leader is responsible for collecting and analysing school data in consultation with the assessment co-ordinator.
- The subject leader will undertake any relevant training and keep abreast of current initiatives.
- The school leader will support colleagues with relevant training, planning ideas, lesson delivery and assessment as appropriate.
- The subject leader, in conjunction with LINK ICT is responsible for the ordering varied and high quality resources that are appropriate for all children to access their learning.

**Other Policies that should be read in conjunction with the Computing Policy.**

- Online Safety Policy
- AUP for pupils.
- QEGSMAT acceptable use policy for staff
- Bullying and online bullying.
- BYOD policy
- Safeguarding policy
- Social Media Policy (TRUST)