



Computing

Statement of Intent

It is our intention at St Giles, to enable our pupils to find, explore, analyse, exchange and present information. We want the children at St Giles to continuously develop so that they can leave our school being computer literate. With technology playing such a significant role in society today, St Giles believe that 'Computational Thinking' is a skill that all children must be taught if they are able to participate effectively and safely in this digital world. Computational thinking is;

Decomposition: Solve a problem by breaking it into smaller pieces. Pattern: Find the order and analyse the data.

Abstraction: Ignore/take away anomalies within the pattern.

Algorithmic Design: Create a solution using a series of ordered steps.

Computational thinking will entail them being able to evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems. Further to this, we intend to build a computing curriculum that develops pupil's learning and results in the acquisition of knowledge of the world around them that ensures all pupils can understand and apply the fundamental principles and concepts of computer science. 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 them to progress to achieve this. We intend to build a computing curriculum that prepares pupils to live safely in an increasingly digital British society.

Implementation:

At St Giles, we are implementing a 3D-curriculum, where online safety is continuously referred to throughout opportunities in learning and more specifically is linked and planned for alongside our PSHE curriculum. Further to this, Online safety skills are developed and taught to be suitable for the child's understanding as well as a being taught with an awareness of what the children are potentially being exposed to. Our computing curriculum provides vertical progression where skills are built upon each year.

Our computing curriculum is delivered by Junior Jam (an external PPA provider). In addition to this, class teachers, teach a minimum of one e-safety lesson per half term. Our curriculum is taught in this way, to ensure that pupils have access to high-quality resources and software, in order to enable them to reach their maximum potential. It also enables it to be taught by a skilled and knowledgeable member of staff.

By the end of KS2, pupils will be familiar with the digital devices and software needed to accomplish specific goals. In addition to this, they will be able to select, use and combine a variety of software and use technologies effectively, safely and responsibly, so that they are prepared for potentially using them more independently in later life, as well as accessing them in Secondary School.

Pupils access our computing curriculum, once per week for a minimum of 1 hour. Each half term, they focus on one of the following areas: iJam, iProgram, iDesign, iAnimate, iFilm, iBroadcast. Each of these have cross-curricular links with Music, Art & Design, or English, to further embed and secure learning.

Each year the progression of skills and level of difficulty increases; for example in Year 3, they will learn iJam at level 1, where as in Year 6 it is taught at level 3. This scheme of learning links directly with the National Curriculum, with most units hitting 3 or more strands from the KS2 Computing Programme of Study. Teaching in this way, also allows for us to revisit prior skills, build on these and check for retention of learning.

Additional lesson plans are in place (sourced from and by Junior Jam) for less able students and higher ability students.

To enable St Giles staff to monitor the learning in this curriculum area, Junior Jam provide a portal for St Giles staff to access. On here, staff are able to identify if the lesson objectives have been met weekly and an overview of what has been taught. Junior Jam staff also complete termly whole class, course feedback, which links directly to the curriculum points for that subject.

Online Safety at St Giles, is currently taught through scheme of learning with Junior Jam and explicitly by class teachers, at least once per half term. Teaching in this way, ensures that children are reminded frequently about how to use technology safely, respectfully and responsibly. In addition to this, there are Online Safety displays around school to serve as a reminder, as well as frequent correspondence to Parents and Carers to encourage the discussion of Online Safety at home as well as school. Our school website also contains links for Parents and Carers to gain additional information alongside links for students to access to find support. Evidence of children's online safety work can be found in their PSHE books. Additionally, in each classroom, is a progression of Skills for ICT, where pupils and teachers can tick off accordingly.

Progression of skills

Year 3

E-Safety: I can talk about what makes a secure password and why it is important
E-Safety: I can recognise websites and games which are appropriate for my age
E-Safety: I ask an adult before I download files from the internet
Programming: I put programming commands into a sequence to achieve an outcome
Programming: I can test my program and debug it if necessary
Multimedia: I can combine a mixture of text, graphics and sound to share my ideas and learning
Multimedia: I can evaluate my work and improve its effectiveness
Multimedia: I can use an appropriate tool to share my work online
Wider world skills: I can save and retrieve work on the internet, the school network or other devices
Wider world skills: I can use search tools to find and use an appropriate website
Wider world skills: I think about whether I can use images that I find online in my own work

Year 4

<p>E-Safety: I choose a secure password when required for a website</p>
<p>E-Safety: I can choose websites and games which are appropriate for my age</p>
<p>E-Safety: I ask an adult before I download files from the internet and can explain why this is important</p>
<p>Programming: I can recognise that an algorithm can help me to sequence more complex programs</p>
<p>Programming: I can use an efficient procedure to simplify a program</p>
<p>Programming: I can recognise an error in a program and debug it</p>
<p>Multimedia: I can create, modify and present documents for a particular purpose.</p>
<p>Multimedia: I can give constructive feedback to my friends to help them improve their work and refine my own work</p>
<p>Multimedia: I can use an appropriate tool to share my work online and collaborate ideas online</p>
<p>Wider world skills: I can tell you whether a resource I am using is on the internet, the school network or other devices</p>
<p>Wider world skills: I think about the reliability of information I read on the web</p>
<p>Wider world skills: I can tell you how to check who own photos, text and clipart</p>

Year 5

E-Safety: I can protect my password and other personal information

E-Safety: I discuss the importance of choosing and using age appropriate websites

E-Safety: I know which resources on the internet I can download and use

Programming: I can break down a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program

Programming: I can refine a procedure using repeat commands to improve a program

Programming: I can use logical reasoning to detect and debug mistakes in a program

Multimedia: I can select, use and combine the appropriate technology tools to create effects which have an impact on others

Multimedia: I can review and improve my own work and support others to improve theirs

Multimedia: I can select an appropriate online or offline tool to create and share ideas

Wider world skills: I can describe the different parts of the internet

Wider world skills: I can use a search engine to find appropriate information and check its reliability

Wider world skills: I can recognise and evaluate different types of information on the web

Year 6

E-Safety: I can protect my password and other personal information and explain the potential consequences of a sharing personal information

E-Safety: I discuss the importance of choosing and using age appropriate websites and explain the potential consequences of spending too much time online

E-Safety: I know how to protect my computer from harm when using the internet

Programming: I can evaluate the effectiveness and efficiency of my algorithm whilst I continually test the programming of that algorithm

Programming: I can use logical reasoning to detect and debug mistakes in a program and algorithm

Programming: I can use a variable and operator to stop a program

Multimedia: I can combine a range of media, recognising the contribution of each to achieve a particular outcome

Multimedia: I be digitally critical when evaluating the effectiveness of my own work and the work of others

Multimedia: I explain why I have used a particular online tool for a specific purpose

Wider world skills: I can tell you about the internet services, such a search engine, to use for different purposes

Wider world skills: I can talk about the way search results are selected and ranked

Wider world skills: I can tell you about copyright and acknowledge the sources of information that I find online.