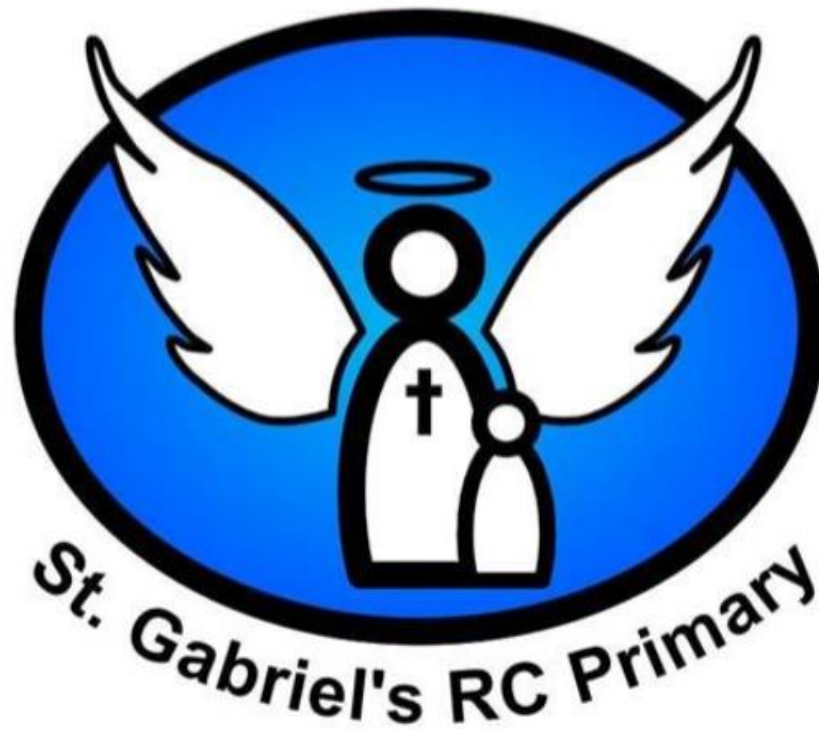




Computing

Intent, Implementation and Impact Policy

Intent, Implementation and Impact in Computing

INTENT	Subject Statement	In Computing, we offer a well-balanced, progressive and inclusive curriculum through the teaching of Computer Science, Digital Literacy and Information Technology, which allows pupils to become creative, resilient learners. We believe that technology is paramount to today's society and it is important for our pupils to be encouraged to become critical thinkers through designing, modifying and evaluating their own programs. It is our intention that pupils are supported to learn to collect, analyse, evaluate and present data and information using a variety of software. Through all of our teaching, we help our children to become respectful and responsible persons when using technology. These valuable and transferrable life skills allow pupils to be prepared, ready and confident for a technological world.
	Subject Expectations	• Computing should be timetabled weekly • Elements of e-safety (wherever appropriate) must be woven into the lesson, particularly when teaching/learning computer science and digital literacy. • Children must use equipment (unless other practical components are required, especially in KS1) • Students must learn to respect equipment; teachers must explain the correct handling of the equipment and supervision by a staff member is a requirement particularly when putting equipment away. • Work (where applicable) must be saved on the W:Drive in the students personal folder. • Any work (where applicable) must be uploaded onto Seesaw when using the i-pads.
	Conditions for learning	<u>Displays / Working Environment</u> • e-safety displays must be in all classrooms. These should be discussed and referred to during lessons that relate to particular topics. <u>Learning Behaviours / Attitudes to Learning</u> • All children to have a positive attitude to learning Computing • To respect the use of equipment • To understand to report anything inappropriate when using the internet • Pupils to have good knowledge and understanding of their year groups e-safety • Pupils to understand and use subject specific terminology • Pupils to develop their resilience and logical thinking to understand how to fix things rather than give up.
	Planning	<u>Progression and Sequencing</u> • Rising Stars scheme consists of 6 units of work that link to the three areas of Computing: Computer Science, Digital Literacy, Information Technology. All units have links to E-safety. • Progression documents are available for staff to assist in identifying attainment of pupils and what it looks like <u>Planning</u> • To follow the Rising Stars scheme of work to assist in long/medium term planning and annotate where necessary for each class. <u>Structure of Lessons</u> • There is currently no set structure, however, teachers are to model content and use the correct terminology for students to gain understanding. Teachers must anticipate issues with understanding, application or the function of software. E-safety to be woven through lessons throughout the year. <u>Resourcing</u> • I pads, laptops, netbooks, Beebots, a variety of software programs installed on the laptops and apps on the ipads for promoting Computing in a variety of subjects. • Eaware to be used to assess e-safety.

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IMPLEMENTATION	Curriculum	<u>Scope</u> - Teachers to use/consult the Rising Stars planning to explore ways to challenge learners; guidance and tasks are provided. <u>Sequencing</u> - Use of the Rising Stars planning scheme build on previous knowledge of year groups and is designed to build on previous skills and provide the appropriate progression for a particular unit of work, for example, coding. The use of Scratch is introduced at Year 2 and is built upon each year group to allow pupils to use more complex functions and create variables on the program and ends at Year 6 where Python is introduced to create written code. <u>Knowledge</u> - Declarative knowledge will be applied through lessons via the use of subject specific vocabulary and subject knowledge. It is 'knowing that' the facts, principles and rules in Computing. For example, knowing that within code, particularly written code, specific function keys must be used otherwise the code will not work, or knowing that understanding right and left in KS1 will provide knowledge to complete a functioning code. - Procedural knowledge will be applied through methods and processes pupils take and 'knowing how to' put something together. For example understanding how code blocks fit together and will ultimately form an algorithm the computer can recognise - CPD videos are provided on the online scheme for staff to learn any skills needed for particular units to allow staff to use the subject specific terminology and skills. - Units and contents of the lessons are suitable and appropriate for year groups and provide opportunities for open-ended questioning - Planning scheme provides links to previous learning and builds on pupils' knowledge and understanding.
	Pedagogy Teaching and Learning Quality 1st teaching based on current research	<u>Learning</u> - Pupils to develop their understanding and use of subject specific terminology; this must progress throughout each year group and be revisited. - Opportunities for pupils to be creative during different modules. - Pupils to develop their resilience and logical thinking to understand how to fix things rather than give up. <u>Teaching</u> - Teachers must consult the Rising Stars planning scheme, in order to determine their long/medium term planning. Modules can be delivered in the order given, unless certain modules fit accordingly with other topic areas that are being taught to the class. - Use of software to be modelled and explained. Where appropriate teachers to create the required work and to incorporate use of questions – what do I do next? Why do I need to use this tool? What does this function do? This can be another way for pupils to explore use of vocabulary. - Key concepts must be embedded and can be revisited throughout the year, particularly the meaning and understanding of vocabulary. The use and functions of different software can be recapped through cross-curricular lessons. - The effective use of TAs to support learners.

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	Meeting the needs of the learner	<u>Planning</u> - Planning is provided but should be annotated and adapted where necessary to meet the needs of learners. - Suggestions are provided within the planning scheme for each lesson detailing how to adapt lessons for SEND needs and/or to provide challenge for GD pupils <u>Provision for SEND / disadvantaged</u> - Teachers and TAs must supervise the work of all learners during lessons where pupils are applying content. Support or recaps to be given to pupils who may not be meeting the expected standard. - Document created for staff to assist with annotating planning for identifying inclusion strategies for pupils. <u>Challenge</u> - Teachers to use/consult the Rising Stars planning to explore ways to challenge learners; guidance and tasks are given. <u>Catch up / interventions / Cumulative dysfluency / Addressing gaps</u> - Interventions – N/A - Catch up – to include cross-curricular links that recaps previous learning.
IMPACT	Review and Assess Assessment for Learning	<u>Questioning</u> - Types of questions are provided for staff within the scheme - Mixture of open-ended and closed questions to check pupil understanding of particular programs but how Computing aspects relate to the wider world - Discussion/debate for e-safety related themes <u>Review of learning</u> - To use formative assessments and teacher judgements to provide verbal feedback to any child/ren who finds/has found a concept difficult. <u>Feedback to improve</u> - Staff to review work/activities during independent learning and provide ways to improve work and/or fix mistakes - Staff to provide modelling to class if necessary as a way to feedback to the class to support improving work
	Summative assessment	- To use eaware assessments to complete children's understanding of e-safety appropriate to their year group. - To use Target Tracker after each unit of work to assess where pupils are up to and to assist in further support needed for particular groups of pupils.
OTHER	Culture	Love of Computing flourishes throughout school by: - Providing engagement opportunities of introducing pupils to finished products, for example – a short film to engage pupils in creating their own, an online game to show the purpose of code, a programmed toy which they will then design and create - These engagement opportunities will then provide links to enrichment opportunities as pupils will then begin to design, create and evaluate their own work
	Wider curriculum opportunities / Cultural capital	- From EYFS to Year 6, opportunities are provided to allow pupils to understand how Computing in all three areas are used within the wider world. From understanding the screens we use and its purpose, to using technology to create designs and provide opportunities to be artistic, whether through the use of photography or tessellation, to create codes using Scratch and Python, manipulating the HTML on websites to understand how websites are created, or measuring the weather. The Computing curriculum provides a plethora of cultural capital opportunities for pupils. - Computing can be used as a cross-curricular tool; to link particular modules to subject areas, e.g. Science, Topic, RE, Geography.
	Reading within the Curriculum Area	- Learning to understand how to read code to enable learners to identify bugs to then debug programs - Progression of coding leading to Y6's use of Python allows pupils to learn to read more complex code and show a greater understanding of the use of function keys and how to read this

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	Related Policies	• Social Media Code of Conduct for Parents Policy • Technology Acceptable Use Agreement • Learning, Teaching and Assessment Policy • Photograph and Video Policy
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