



SJF 'The Big Picture Curriculum'

INTENT - COMPUTING

What is the purpose of the curriculum?	Our Curriculum aims to produce pupils who:	<p>*are instilled with morals and Gospel values that enable them to live their life to the full *are independent, confident, lifelong learners</p> <p>*meet their full potential *are equipped with relevant knowledge and skills to be successful in their next stage of learning</p> <p>*understand their contribution to society and the impact this can have *have had their individual needs met at every stage</p>							
	Strong individual values	Love		Learn		Achieve			
What are we trying to achieve?	Focus for learning	Attitudes and Attributes (independence, resilience, creativity, risk-taking)		Skills (reading for learning, transferrable English, mathematical and scientific skills)		Knowledge and Understanding (subject knowledge, embedded understanding, make links and			
	Components	Lessons	Assemblies	Theme Weeks	Local Environment	Workshops and	Parents/carers		
How are we going to organise learning to achieve our aims?		Trips and residentials		PTA Events		Church and Parish			
		Highly effective teaching & learning is dependent on...							
	Pedagogical approaches	* Reviewing Material		* Sequencing Concepts & Modelling		...the learning having meaning to all pupils		...regular and effective feedback and Intervention	
		* Questioning		* Planning Stage of Practice		...worthwhile classroom dialogue		...building on what pupils already know	
		Implementation of Rosenshine's principles of instruction as themed by Tom Sherrington							
		Depth is embedded by...							
		...clear focus on meaningful memory	...making explicit links between concepts and themes	...making it immersive and engaging	...making it relevant and purposeful	...expressing/ demonstrating learning in a wide variety of ways	...themes being revisited within and across subjects and		
	...promoting problem solving and lateral thinking		...helping pupils to transfer skills and re-apply skills/ knowledge		...giving children more ownership of their learning				
SJF areas of learning	National Curriculum	Enrichment							
		Spiritual and Catholic life of the school	Citizenship (British values and charitable works)	Extra curricular themed learning (theme weeks/ days)	Extra curricular well being activities (sports, creative, performing)	Home/school partnerships			
Strategies to evaluate impact of teachers & learning	Formative assessment for learning (teacher/ peer/ self)	Whole school community (parents, governors, staff, pupils)	Standardised summative tests to validate teacher assessment	Shared and professional dialogue (pupil progress meetings/ moderation)	Immediate and timely feedback				
					Verbal feedback (regular and relevant)		Written feedback (meaningful / motivating)		
Accountability measures	Attainment and Progress		Behaviour		Attitudes to learning		Mental Wellbeing		
	Responsible and respectful global citizens		Attendance		Confidence and Independence		Physical Wellbeing		



COMPUTING INTENT

Intent of curriculum:

At St John Fisher our school motto, **'Together we grow in God's love, learning to be the best we can be'** reflects our vision; to strive for every pupil to grow emotionally and spiritually, to set and reach aspirational goals, gaining a lifelong love of learning regardless of their starting points or individual experiences and motivation.

Through the inspiration to **'Love, Learn, Achieve'** our pupils should leave our school inspired, valued and cared for, equipped with the necessary skills, values and attitudes for their next stage in education.

At St John Fisher, we recognise that children are living within an increasingly technological world and aim to provide them with the skills and knowledge to be confident in this area. Through our teaching of computing, we aim to develop confident, independent learners who are able to plan, design, create, program and evaluate information through the use of technology.

We realise the importance of considering both the benefits and risks of technology, with online safety integrated throughout computing lessons, as well as the wider curriculum.

We teach a progressive computing curriculum in which pupils can demonstrate an understanding of the skills, knowledge and vocabulary relevant to their age, whilst frequently revisiting the skills and knowledge they have learned in prior years, in order to maximise pupil progress.

At St John Fisher, we use the **'Rising Stars: Switched On Computing'** scheme from Year 1 to Year 6 to meet the aims of the National Curriculum. The scheme aims to develop pupils' computational thinking and creativity, so that they can 'understand and change the world'. The scheme recognises that computing has three interrelated aspects, and these are covered in each year:

- Computer Science (the foundations of computing, covering coding and computational thinking);
- Information Technology (the applications of computing, including working with documents, data and digital media);
- Digital Literacy (the implications of computing for individuals and society).



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This scheme also recognises the 'spiral' nature of progression within computing: new knowledge, skills and understanding within each of the strands of the subject build on what's gone before. For example, in programming pupils are introduced to a simple sequence of recorded button presses on a BeeBot in Year 1, then move on to building programs by snapping together blocks to move sprites in Scratch Jr before going on to create their own animations, quizzes and games in Scratch. Pupils progress from simpler to more complex programming languages, but also build up their conceptual understanding of programming from sequence, through repetition and selection to variables, input and output

By the end of Year 2: Outcomes (Refer to the Curriculum Maps, Progression of Skills map)

PROBLEM SOLVING:

- Understand what algorithms are.
- Understand how algorithms are implemented as programs on digital devices and that programs execute by following precise and unambiguous instructions.

PROGRAMMING:

- Create and debug simple programs.

LOGICAL THINKING:

- Use logical reasoning to predict the behaviour of simple programs.

CREATING CONTENT:

- Use technology purposefully to organise, store and retrieve digital content.
- Use technology purposefully to create and manipulate digital content.

SEARCHING:

- Use technologies effectively.

E-SAFETY:

- Use technology safely and respectfully.
- Keep personal information private.
- Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

USING INFORMATION TECHNOLOGY BEYOND SCHOOL:

- Recognise common uses of information technology beyond school.



By the end of Year 4: Outcomes (Refer to the Curriculum Maps, Progression of Skills map)

PROBLEM SOLVING:

- Design, write and debug programs that accomplish specific goals.
- Control or simulate physical systems.
- Solve problems by decomposing them into smaller parts.

PROGRAMMING:

- Use sequence, selection and repetition in programs; work with variables.
- Work with various forms of input and output.

LOGICAL THINKING:

- Use logical reasoning to explain how some simple algorithms work.
- Use logical reasoning to detect and correct errors in algorithms and programs.
- Understand computer networks including the internet.
- Understand how networks can provide multiple services, such as the World Wide Web.

CREATING CONTENT:

- Select, use and combine a variety of software (including internet services) on a range of digital devices.
- Design and create a range of programs, systems and content that accomplish given goals.
- Collecting, analysing, evaluating and presenting data and information.

SEARCHING:

- Use search technologies effectively.
- Appreciate how search results are selected and ranked.

E-SAFETY:

- Use technology safely, respectfully and responsibly.
- Recognise acceptable and/or unacceptable behaviour online.
- Be discerning in evaluating digital content.
- Understand the opportunities networks offer for communication and collaboration.

USING INFORMATION TECHNOLOGY BEYOND SCHOOL:

- Recognise common uses of information technology beyond school.



By the end of Year 6: Outcomes (Refer to the Curriculum Maps, Progression of Skills map)

PROBLEM SOLVING:

- Design, write and debug programs that accomplish specific goals.
- Controlling or simulating physical systems.
- Solve problems by decomposing them into smaller parts.

PROGRAMMING:

- Use sequence, selection and repetition in programs; work with variables.
- Work with various forms of input and output.

LOGICAL THINKING:

- Use logical reasoning to explain how some simple algorithms work.
- Use logical reasoning to detect and correct errors in algorithms and programs.
- Understand computer networks including the internet.
- Understand how networks can provide multiple services, such as the World Wide Web.

CREATING CONTENT:

- Select, use and combine a variety of software (including internet services) on a range of digital devices.
- Design and create a range of programs, systems and content that accomplish given goals.
- Collecting, analysing, evaluating and presenting data and information.

SEARCHING:

- Use search technologies effectively.
- Appreciate how search results are selected and ranked.

E-SAFETY:

- Use technology safely, respectfully and responsibly.
- Recognise acceptable and/or unacceptable behaviour online.
- Know a range of ways to report concerns and inappropriate behaviour.
- Be discerning in evaluating digital content.
- Understand the opportunities networks offer for communication and collaboration.

USING INFORMATION TECHNOLOGY BEYOND SCHOOL:

- Recognise common uses of information technology beyond school.



Implementation of curriculum:

At St John Fisher we believe that 'Quality First Teaching' is the key to implementing an effective, creative and enriching curriculum. It encourages and enables students to become more curious, engaged and independent learners; promoting challenge and a 'love' of learning.

In order to ensure 'Quality First Teaching' within the computing curriculum, we strive for the planning of this subject to be personalised to each class and the individuals within them.

Units of work typically include cross-curricular connections to things our pupils will be studying elsewhere in the curriculum, helping them to see how computing can be applied in a wide range of contexts, but also promoting retention in both domains as pupils make and reinforce the connections between new ideas.

Planning incorporates clear differentiation, catering for the individual needs of all pupils, including differentiated learning outcomes, so that teachers can identify where pupils' work fits with a set of age-related expectations. Outcomes are clear, so the pupils have an idea of where they are heading. Teachers model examples of what is expected and facilitate discussion, with carefully planned questioning to support pupils' understanding and development and provide appropriate challenges for all the pupils within the class.

'Quality First Teaching' provides the opportunity for teachers and pupils to reflect on and evaluate their progress and understanding within lessons, allowing for adaptation and adjustment as part of assessment for learning. At St John Fisher we strongly believe that cultural capital and social status should not disadvantage any pupil and we aim to provide all pupils with the opportunity to succeed and reach their potential, or beyond, by providing an enriching curriculum, further enhanced by creative and extra-curricular opportunities.

In The Early Years, computing encourages creativity, activeness, exploration, playfulness and promotes critical thinking. Children have the opportunities to access technology in the provision. The children are provided with a range of opportunities to use the Smart interactive whiteboards, laptops and iPads. The children also have access to technological coding toys, digital cameras and recording equipment as well as a range of other technical equipment.

In Key Stage 1, children are beginning to develop their computing skills through using a range of technology such as Bee Bots, Computers and iPads. Children develop their skills to navigate around a computer and use a range of programmes to copy and paste images and insert text boxes. The use of the internet to search images is incorporated alongside internet safety to reinforce the importance.



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In Key Stage 2, children build upon previous skills and apply these to a variety of different technologies. The use of the green screen and various apps provide opportunities for children to apply their skills in a variety of contexts.

Throughout their computing lessons, pupils develop skills in working with others, including contributing to and leading shared group work. They become adept at giving constructive, critical feedback, and on acting on feedback they receive from their teachers and peers. Using Google Apps for Education, pupils can build up a portfolio of their creative work, demonstrating how their skills and their thinking have developed over their years at the school.

Monitoring Impact:

At St John Fisher we ensure the effective monitoring of the impact of our computing curriculum by ensuring our computing lead carries out a range of activities. The computing lead will develop their subject knowledge and experience through looking at learning, planning and equipment audits, pupil portfolio audits, reviewing learning environments, data analysis and pupil voice.

An evaluation of all of the above activities feeds into their curriculum review and leads to their computing action plan. Information gathered is collated, reviewed and feeds forward into meaningful, succinct action plans. These action plans feed into our overall School Development Plan, where appropriate. The computing lead updates and informs school governors regarding teaching and learning in their subject and the impact of the curriculum on learners.