Computing & Online Safety
-Curriculum Intent, Implementation and Impact Statement 2026-

Intent

The intent of Church Vale's Computing curriculum is to equip pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world. Interwoven throughout the whole curriculum (including links with PSHRE) are Online Safety themes where children learn how to use the internet, how to stay safe, how to behave and who they can talk to if they have a problem when they are online.

Key Concepts

Lessons will focus on the key concepts of being a computational thinker, user and creator, within the breadth of the EYFS, KS1 and KS2 topics. The broad key skills for Computing are:

- To understand and apply concepts of computer science, including abstraction, logic, algorithms and data representation.
- To analyse and solve problems through the skill of writing computer programs.
- To evaluate and apply information technology to solve problems.
- To become a responsible, competent, confident and creative user of information and communication technology, including safe and considerate internet use.

Teaching objectives will focus on developing knowledge, understanding and skills within the Computing Curriculum. At Church Vale, we have adopted the Government approved and funded 'NCCE Teach Computing Scheme'. Objectives from this may be taught through a topic-based approach where the Computing skills being taught will be made explicit. For example, to use 'Castles' to create a multimedia presentation. Teachers will adapt and amend the planned units within the scheme to suit the needs of their classes.

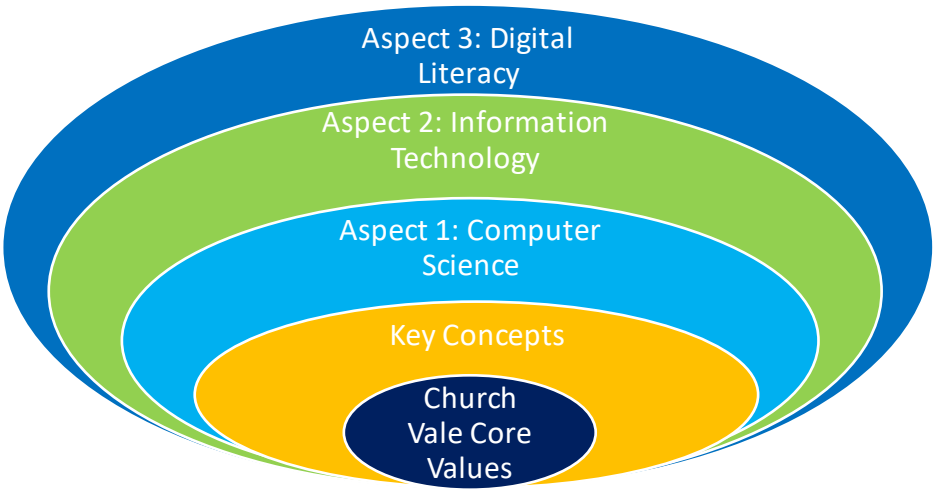
Each topic will include 'sticky knowledge' and key vocabulary. These will be made explicitly clear in planning and within each unit's Knowledge Organiser.

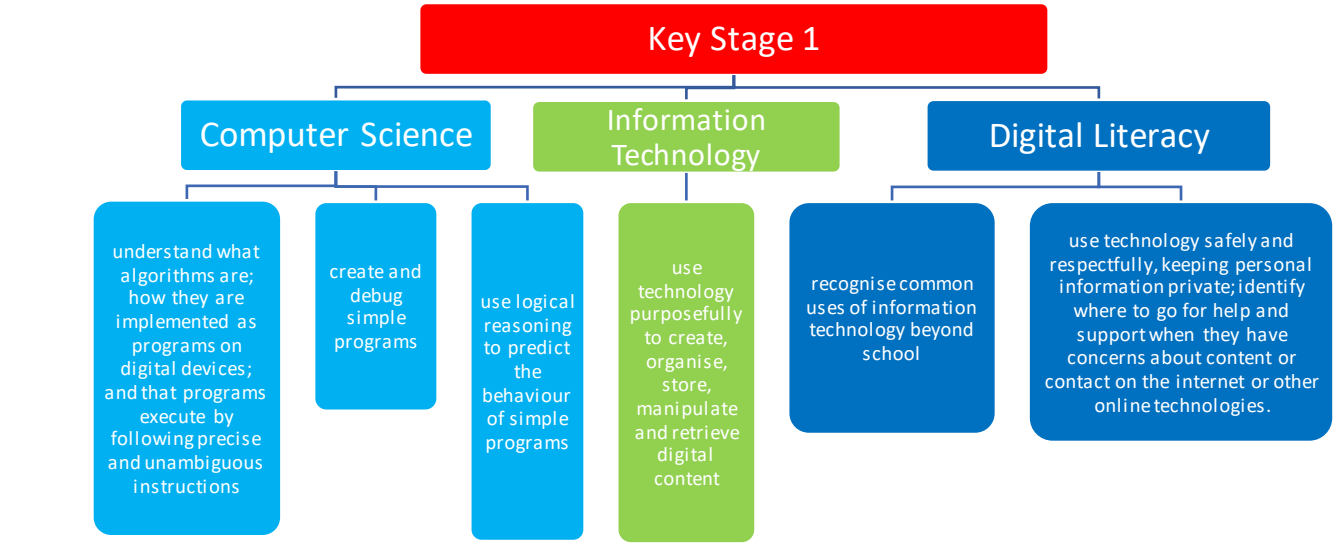
Interwoven throughout the Computing curriculum, are our 3 **core Church Vale values** of **possibilities**, **community**, and **self-awareness.** These will be explicitly explored alongside and within our breadth of study.

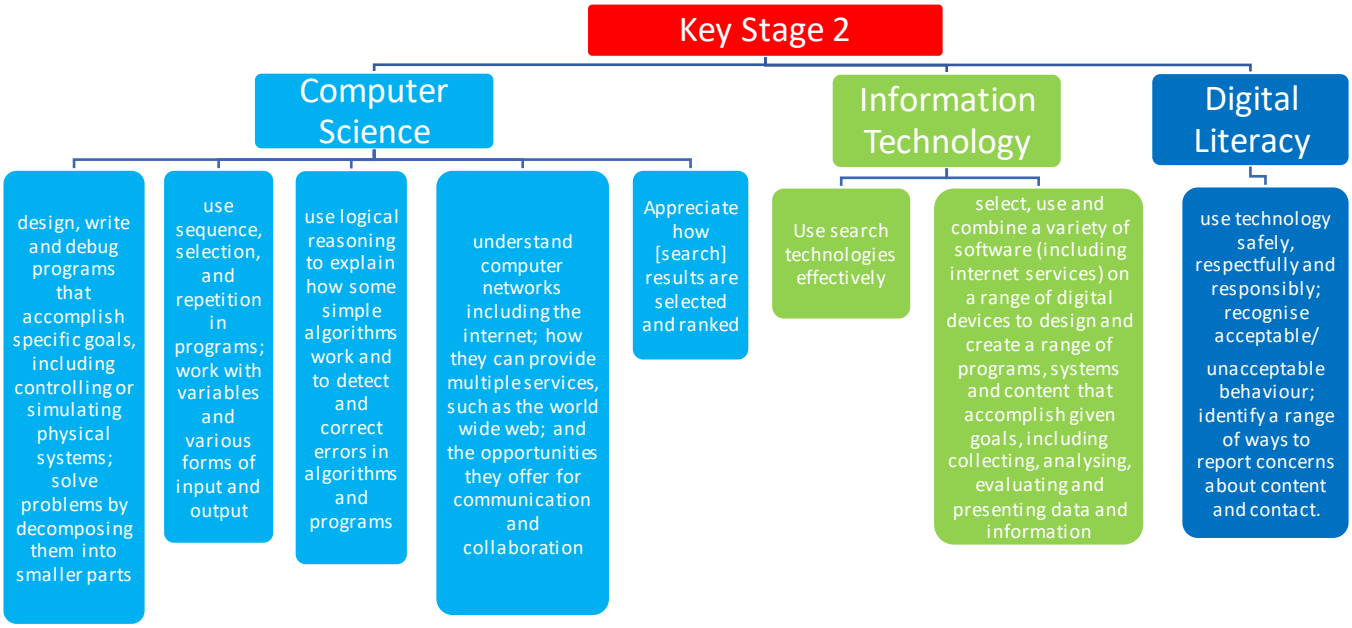
Computing & Online Safety
-Curriculum Intent, Implementation and Impact Statement 2026-

Implementation

To enable a continued thematic approach, key concepts will be mapped out across the Key Stages 1 and 2.







Computing & Online Safety
-Curriculum Intent, Implementation and Impact Statement 2026-

Topics taught can be flexible, as long as the concepts are explored by the end of each stage of learning and the key concepts within each unit of the 'NCCE' framework are covered. Computing topics may link to other curriculum areas but computing skills and concepts taught will be made explicit.

Pupils will gain 'sticky knowledge', build on their key concepts as they are applied to the knowledge they acquire and will have a central task throughout the topic in which to demonstrate their learning and understanding.

Digital Literacy skills and Online Safety units will be taught frequently (at least once per half term) within each year group from EYFS to Y6. This aspect of the computing curriculum will be taught within PSHRE lessons and issues may need to be addressed within whole school/key stage/class assemblies. The underlying concepts of Digital Literacy/Online Safety will be revisited and revised within year groups as needed and as is appropriate throughout each term. Teachers will refer to and follow the 'Education for a Connected World' framework, as recommended by the DfE https://assets.publishing.service.gov.uk/media/5efa05b4e90e075c5492d58c/UKCIS_Education_for_a_Connected_World_.pdf.

Keeping Children Safe in Education 2026 states:

"164. It is essential that children are safeguarded from potentially harmful and inappropriate online material. An effective whole school and college approach to online safety empowers a school or college to protect and educate pupils, students, and staff in their use of technology and establishes mechanisms to identify, intervene in, and escalate any concerns where appropriate." Page 46

Therefore, we have also adopted the PSHRE scheme 'One Decision' and the Online Safety units featured within this scheme will supplement 'EDFCW', to ensure Online Safety is thoroughly and explicitly taught within each year group. New 'Simply RHSE' lessons from 'One Decision' will be taught during class assembly times or within the PSHRE subject allocation time. Online Safety lessons should be taught within PSHRE throughout the year to ensure a solid coverage of all aspects (further support and guidance can be found in the KS1 and KS2 NCCE framework/online safety overviews). Teachers will use 'Project Evolve', 'Barefoot Computing' or 'Common Sense Education' resources to support their teaching of the key strands outlined within the 'Education for a Connected World' framework. Teachers should teach at least one Online Safety lesson per half term and follow the whole school yearly plan, covering the following themes:

Autumn- Self Image and Identity & Online Relationships

Spring- Online Reputation & Online Bullying

Summer- Managing Online Information, Health, Wellbeing and Lifestyle & Privacy and Security & Copyright and Ownership.

The four areas of risk (content, contact, conduct and commerce) as identified in KCSiE 2026 will be explored throughout Online Safety lessons and will contain appropriate lesson content for each year group:

"165. The breadth of issues classified within online safety is considerable and ever evolving, but can be categorised into four areas of risk: content: being exposed to illegal, inappropriate, or harmful content, for example: pornography, racism, misogyny, self-harm, suicide, antisemitism, radicalisation, extremism, extreme sexual or physical violence, misinformation, disinformation

(including fake news) and conspiracy theories, contact: being subjected to harmful online interaction with other users or generative AI applications that simulate this; for example: peer-to-peer pressure, commercial advertising and adults posing as children or young adults with the intention to groom or exploit them for sexual, criminal, financial or other purposes, conduct: online behaviour that increases the likelihood of, or causes, harm; for example, making, sending and receiving explicit images, including those generated using AI and online bullying, and commerce: risks such as online gambling, inappropriate advertising, phishing and or financial scams. If you feel your pupils, students or staff are at risk, please report it to the Anti-Phishing Working Group (https://apwg.org/)." Page 46

EYFS

Computing is no longer a subject which features within the Early Years framework, however, here at Church Vale we believe children should experience the use of technology in their early school life in order to equip them for the KS1 curriculum and provide life skills. Within continuous provision in the Foundation unit, there are many sources of technology for the children to explore, interact with and use creatively. Resources include:

- Pretend devices- phones, keyboards, laptops, cameras. Children use these within their explorative play.
- Real devices- iPads, cameras, Vtech toys, BeeBots, Desktop computers and interactive whiteboards.

It is our belief that technology plays such a huge part in day-to-day life that our youngest children should begin their journey with the use technology at school.

Online Safety will be taught explicitly termly and teachers will refer to 'Education for a Connected World', 'Barefoot Computing' and 'Project Evolve' to support their planning and teaching. In the Summer term, the F2 class will visit the Computing Suite to learn how to log onto a computer, use a mouse and navigate within appropriate software such as the 2Simple Collection. They will also learn how to 'shut down' a computer to prepare them for the Y1 curriculum.

Progression of Key Concepts (based on the NCCE Teach Computing Scheme, OneDecision PSHE Computer Safety Modules and Sheffield Primary Computing Progression Framework for EYFS):

Key Concepts	EYFS	KS1	KS2
Computer Science To understand and apply concepts of computer science, including abstraction, logic, algorithms and data representation. To analyse and solve problems through the skill of writing computer programs. **NCCE Strands-** AL (Algorithms),	**CS:** - Interact with age appropriate software. - Complete simple computer games. - Explore technology. **AL, PG:** - Repeat an action with technology to trigger a specific outcome. - Recognise the success or failure of an action. - Follow simple instructions to	**CS:** - Identify technology in the home and beyond school, naming the computer and its main parts. - Use a mouse and keyboard to edit text. **AL, PG:** - Explain what commands will do. - Combine forwards, backwards and directions into sequences. - Plan simple programs, test and debug. - Create algorithms for a given purpose.	**CS, NW:** - Explain how digital devices function and how they can be connected. - Identify input and output devices. - To explain how computer networks can be used to share information. - Recognise networked devices make up the internet. - Describe how content of the WWW is created by people and outline how websites can be shared on the WWW. - To recognise the physical components of a network. - Explain that computers can be connected together to form systems and know how information is transferred over the internet. - Contribute to a shared project online. - Use search engines and be able to identify how to use one, how search engines select results, how they are ranked and why the order of results is important. **AL, PG:** - To control sprites using commands (in Scratch).

Computing & Online Safety
-Curriculum Intent, Implementation and Impact Statement 2026-

CS (Computer Science), NW (Networks), PG (Programming)	control a digital device. - Recognise that we control computers. - Input a short sequence of instructions to control a device.	- Explain that a sequence of commands has a start and an outcome. - Create a program using own/given design. - Evaluate and improve projects.	- To know that commands need a sequence and an order. - To edit and change the appearance of a project. - Create a program to move a sprite in four directions. - Adapt, add features, identify and fix bugs within programs. - Create text-based programmes. - Know what repeats and loops are and be able to use them. - Decompose programs into parts. - Explain the differences in loops (infinite, count controlled) and be able to use them in programming. - Design and create projects using repetition. - Design a project that includes selection. - Create a controllable system using selection. - Design, create and evaluate a program which uses selection and be able to explain how the selection directs the flow of the program. - Explain why variables are used in programs. - Design, create, improve and evaluate a game using a variable. - Create a program to run on a controllable device. - Explain selection can control the flow of a program, update a variable with a user input. - Design a project that uses inputs and outputs on a controllable device.
Information Technology To evaluate and apply information technology to solve problems, store/sort/retrieve data and create digital content for meaningful purposes. **NCCE strands:** CM (Creating Media), DI (Data and Information), DD (Design and Development), ET (Effective Use of Tools).	**CM, DD, ET:** - Use different digital devices. - Recognise that you can access content on a digital device. - Use a mouse, touchscreen or appropriate access device to target and select options on screen. - Recognise a selection of digital devices. - Recognise the basic parts of a computer, e.g. mouse, screen, keyboard. - Select a digital device to fulfil a specific task, e.g. to take a photo. Use technology to explore and access digital content. - Operate a digital device with support to fulfil a task. - Create simple digital content, e.g. digital art.	**DI:** - Label and group objects using data packages. - Create pictograms. - Select objects by attributes. **CM, DD, ET:** - Use shape tools. - Create a digital painting and compare to real paintings. - Use the computer to write. - Add/remove/edit text and compare writing to computer writing. - Use digital devices to take/edit photographs. - Know that images can be changed. - Explain how information can be presented on a computer. - Create, review and refine music.	**DI:** - Create branching databases using yes/no questions and explain why they need to be well structured. - Use digital devices to collect data including using sensors/data logging. - Answer questions using collected data. - Record information using a database. - Group and sort data. - Compare data and answer real-world questions. - Use a spreadsheet to collect data, use formulas, plan events and present data. **CM, DD, ET:** - Plan, review, improve and evaluate an animation (Stop-Frame). - Recognise how text and images convey information. - Create information using publishing software, selecting suitable layouts. - Use digital devices to record, store, edit and combine sound/audio. - Use devices to create, edit, change and improve images. - Capture video footage using a device. Edit and reshoot video. - Create vector drawings by combining shapes using tools to achieve a desired result. - To evaluate different methods of communication. - Design a webpage considering copyright and implications of linking content owned by others. - Use a computer to create 3D graphics.

Computing & Online Safety
-Curriculum Intent, Implementation and Impact Statement 2026-

	- Choose media to convey information, e.g. image for a poster. Access content in a range of formats, e.g. image, video, audio. - Answer basic questions about information displayed in images e.g. more or less.		
Digital Literacy To become a responsible, competent, confident and creative user of information and communication technology, including safe and considerate internet use. To understand how computer networks work. **NCCE Strands:** SS (Safety and Security), IT (Impact of Technology).	**SS, IT-** - Are aware that some online content is inappropriate. - Are aware that information can be public or private. - Know to tell an appropriate adult if they see something on the computer that upsets them.	**SS, IT-** - Create rules for using technology responsibly. - Use technology safely. - Keep personal information private. - Use technology respectfully. - Know where to go to get help. - Know how technology is used inside and outside of school.	**SS, IT-** - Use technology safely, respectfully and responsibly. - Know what is acceptable and unacceptable online behaviour. - Identify a range of ways to report concern about content and contact. - Understand the need to make choices when using technology and recognise sometimes things can be true/false. - Recognise the risks of using online technology. - Know how to minimise online risks. - Evaluate the consequences of unreliable content. - Know that not all images are real. - Recognise that working together on the internet can be public or private - Understand and explain what copyright is.

Education for a Connected World Strands with OneDecision (OD) Links-

Self-Image and Identity (plus OD unit Image Sharing),

Online Relationships (plus OD unit Making Friends Online),

Online Reputation, Online Bullying (plus OD unit Online Bullying),

Managing Online Information (plus OD Computer Safety),

Health, well-being and Lifestyle,

Privacy and Security,

Copyright and Ownership.

OD RHSE units- “Wellbeing Online” & “Online Safety and Awareness”.

Computing & Online Safety
-Curriculum Intent, Implementation and Impact Statement 2026-

Evidencing Pupil's Work

EYFS- Tapestry is used to evidence learning across all curriculum areas within the high-quality provision provided.

Key Stage 1 and Key Stage 2- SeeSaw is used to evidence learning from each Computing unit and Online Safety units. Online Safety Worksheets will be stuck into RE/PSHRE books. Evidence of worksheet work for Computing will be evidenced using SeeSaw.

It is expected that teachers will provide photographic, video or voice noted SeeSaw evidence at least once per Computing unit. Activities may also be set via SeeSaw which relate to the relevant units. It is useful if these are tagged within named work folders for ease of access during monitoring. This should be manageable and should not create a massive workload for teaching staff.

Impact

Through the development of Computing key concepts and skills, learners will be confident and competent digital citizens. They will acquire knowledge and understanding of how to use technology effectively for desired, relevant and meaningful purposes. We will foster a love of technology and teach children to be proficient users, be creative and avoid technology use as merely a consumer. They will be positive role models within the online world and will be respectful and responsible internet users. Learners will acquire programming skills, which will enable them to create and write effective computer programs, evaluate them and improve them. Children will begin to understand what AI is and know how to identify images/articles that are real or fake. They will be critical thinkers, pattern spotters and trouble-shooters- skills that they will need in this ever-changing digital and technological world.

Tanya Leadbeater

September 2026