



Court de Wyck Church School Computing Policy

Growing Together, Belonging and Achieving

Everybody in our caring Christian Community inspiring, nurturing and challenging each other to do their best in mind, body and spirit to achieve more than they ever thought possible.

John 10:10 'Life in all its fullness'

Our Curriculum Intent

At Court de Wyck Church School our curriculum is child-centred, aspirational and purposeful in order to instil within our pupils the knowledge, skills and confidence needed for their ever-changing futures. Its focus is on nurturing pupils' natural curiosity and love of learning, supporting them to develop resilience and understanding of the world around them. It encourages pupils to make connections and to be creative, independent thinkers who relate their learning to real- life experiences. At the heart of our curriculum are our Christian values and the dedication to working collaboratively to achieve more than we ever thought possible.

Our Computing Intent

At Court de Wyck, we have set our curriculum intent with our children at the centre. Our school curriculum intent is underpinned by the Bath and Wells Multi Academy Trust curriculum intent.

- It meets the requirements of the National Curriculum programmes of study for computing.
- It provides a relevant, challenging, and enjoyable curriculum for computing for all pupils.
- It provides opportunities to use ICT and computing as a tool to enhance learning throughout the curriculum.
- It provides opportunities for cross curricular learning, especially in mathematics, science, design and technology.
- It equips pupils with the confidence and capability to use ICT and computing throughout their later life and gives them essential skills for life in the 21st century.
- It develops pupil's understanding of technology and how it is constantly evolving.
- It allows pupils to explore a range of digital devices.
- It develops the pupils understanding of how to use ICT and computing safely and responsibly.



Our computing curriculum is based on the following principles:

- Pupils can develop their understanding and apply the fundamental principles of computer science, including algorithms, data representation, and communication.
- Ensuring that pupils can analyse problems in computational terms and have repeated practical experience of programming their own computer content, such as programs and systems.
- Provide opportunities for pupils to learn to think creatively, reason systematically, and work collaboratively.
- Allow pupils to evaluate and apply information technology, including new or unfamiliar technologies.
- Lessons will be both theory and practical based to enhance pupil's understanding.
- Teachers create responsible users of information and communication technology by ensuring all pupils understand E-Safety.

Computing Curriculum Planning, Continuity and Progression

At Court de Wyck Church School, computing is taught alongside our learning themes and to support learning within the classroom in all subjects. Our curriculum is carefully planned to engage and excite all our learners. We use Barefoot and Curriculum Maestro to map out the skills and themes covered each term in Lower School (Y1-3) and Upper School (Y4-6). These plans define what we will teach and ensure an appropriate balance and distribution of work across each term. We ensure progression across the school so that knowledge and skills are built up year on year taking account of children's prior knowledge and experience of key concepts. A whole school ICT suite of computers, a class set of tablets, digital projectors and Promethean interactive whiteboards placed in each classroom are used as a teaching and learning resource across the curriculum.

Intent Overview by Key Stage

We have variable mixed age classes and so we plan the progression of learning for pupils in cycles. These ensure that pupils have the prerequisite knowledge to learn new material, make links and remember more. This is a summary of what the pupils will learn in each key stage. More detail about an individual cycle is available. We use Barefoot computing to frame and plan our computing lessons around.

Early Years Foundation Stage

Computing is taught in Early Years as an integral part of the learning theme through child-initiated and adult led activities. In the Early Years Foundation Stage, pupils begin to understand that information can be received from computers, therefore during this Early Years Foundation stage pupils will have the opportunity to complete simple programs on a computer as well as interact with age-appropriate computer software.

During the EYFS, pupils should:

- Know and talk about the different factors that support their overall health and wellbeing such as sensible amounts of 'screen time'.
- Develop their fine motor skills so that they can use a mouse or touch pad effectively.
- Explore, use and refine a variety of artistic effects on the computer to express their ideas and feelings experimenting with colour, design, texture, form and function.



Key Stage 1

During Key Stage 1, pupils should:

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
- Create and debug simple programs.
- Use logical reasoning to predict the behaviour of simple programs.
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- Recognise common uses of information technology beyond school.
- Use technology safely and respectfully, keeping 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.

Key Stage 2

During Key Stage 2 pupils should:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Use sequence, selection, and repetition in programs, work with variables and various forms of input and output.
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
- Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration.
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.
- Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.



Implementation

At Court de Wyck, pupils are provided with a broad and balanced curriculum in computing which is tailored to be inclusive for all. Computing is an integral part of preparing children to live in a world where technology is continuously and rapidly evolving, so much so that children are being prepared to work with technology that doesn't even exist yet. For this reason, we feel that it is important that children are able to participate in the creation of these new tools to fully grasp the relevance of and the possibilities of emerging technologies thus preparing them for the world of work.

Throughout their learning in Computing, we ensure that all pupils:

- Follow the progression of skills relevant to their current cycle and all children access all coverage from Y1-6 by the time they leave school.
- Are provided with curriculum materials and programmes, which are in no way class, gender or racially prejudice or biased.
- Have opportunities to use the school computers/tablets/internet to develop independent learning of those who do not have access to such technology at home.
- Receive continuity throughout the school to ensure that experience and skills are developed in a cohesive and consistent way.
- Have access to computers, netbooks and iPads/tablets within class or in designated communal areas.
- Experience a variety of well – planned, structured and progressive activities.
- Experience cross-curricular links to widen children's knowledge of the capability of computing including safe use of the internet and other digital equipment.
- Have opportunities to recognize the value of computing and ICT in their everyday lives and their future working life as active participants in a digital world.
- Access and use a variety of technologies in Computing lessons as well as lesson in the broader curriculum.

Impact

At Court de Wyck, we intend for the impact of our high-quality Computing curriculum to be that pupils will learn the curriculum each year so that by the end of their time at school they will have a strong understanding of what it means to be a technician and have learnt the key knowledge they need to succeed and prosper. Disadvantaged pupils and pupils with SEND will acquire the knowledge and skills needed to move on to the next stage of their education.

Our impact is measured through learning walks and informal assessment of children's understanding and progress by the class teacher. Teachers regularly assess capability through observations, discussions with pupils and looking at completed work. It should be process orientated – reviewing the way that techniques and skills are applied purposefully by pupils to demonstrate their understanding of the concepts of ICT and Computing. Formative assessments are carried out during and following focussed tasks and activities. They provide pupils and teaching



staff the opportunity to reflect on their learning in the context of the agreed success criteria. Regular revisiting of learning is an integral part of each lesson and enables teachers to use AfL effectively to move children's learning forward.

Progression of Skills in Computing

	Owls Year A Year 1 Curriculum	Owls Year B Goldfinch Year B Year 2 Curriculum	Goldfinch Year A Year 3 Curriculum	Kingfisher/Kestrel Year C Year 4 Curriculum	Kingfisher/Kestrel Year A Year 5 Curriculum	Kingfisher/Kestrel Year B Year 6 Curriculum
Communication	Explain simply that digital technology can be used to connect with others locally and globally.	Use digital technology appropriately to communicate and connect with others locally and globally.	Explain the advantages and disadvantages of communicating electronically and strategies for preventing issues.	Explain actions to report and prevent cyberbullying.	Demonstrate appropriate online behaviour and apply a range of strategies to protect themselves and others from potential online dangers, inappropriate behaviour and bullying.	Recognise that sending intimate images and content and using offensive language online is a risk, has a permanent online trail (digital footprint) and is not appropriate behaviour.
Staying Safe	Recognise that some websites ask for private information and discuss how to handle these requests and where to go for help and support.	Stay safe online by choosing websites that are appropriate to visit (based on the confidence you have in the author(s) of the website) and know where to go for help and support when they have concerns about content or contact on the internet and other online technologies.	Describe simple rules for sharing images and data safely.	Identify the positive and negative influences of technology on health and the environment and how to protect themselves.	Discuss the impact that digital content can have and why it is important to discuss their use of technology with an adult.	Identify the benefits and risks of devices broadcasting the user's location and of giving personal information to different organisations.



Digital citizenship	Recognise that work they have created belongs to them.	Recognise that information put online leaves a digital footprint.	Compose clear and appropriate messages in online communities.	Identify appropriate behaviour when contributing to collaborative online projects for learning.	Cite all sources when researching and explain why sources should be provided.	Recognise that digital content can be edited online.
Processes	Observe and explore outcomes when buttons are pressed in sequences on a robot and identify and debug a simple algorithm.	Plan and enter a sequence of instructions using a robot, specifying distance and angle of turn.	Design, write and enter a sequence of instructions using a robot or other device to achieve specific outcomes, debugging if necessary.			Design, write and debug a program to control a physical system, which may include output devices, such as motors, lights and buzzers.
Creativity	Select appropriate software to complete given tasks using text, images, audio and video clips.					Select, use and combine a variety of software, including internet services, to meet a goal.
Investigation	Follow a sequence of steps to solve a problem and create instructions that others can follow (for floor robots or onscreen sprites). Show awareness that work they create and save on a computer or tablet can be shown to others using another device.	Create a simple solution that tests an idea, predict the outcome and test and debug the solution to ensure that it works. Recognise that computers can be linked to share resources and digital content can be stored, organised and retrieved.	Identify and use repetitions or loops in a program sequence, predicting outcomes and noticing and correcting any mistakes.	Describe and demonstrate a simple program that contains a looping element and how part of a program may need repetition. Recognise that the school network links computers to allow the sharing of resources.	Design, write and debug simple sequences of instructions (algorithms), including IF, THEN and OTHERWISE commands, to decide if something is true or false. Compare the ways in which work can be shared on a school network with the ways work is shared at home or in the wider world.	Demonstrate how programs run in an exact order by following a sequence of instructions, and test and debug programs.
Materials	Use a range of computing	Use computing hardware in	Use a range of different software to	Apply computing skills to use new computing software.	Apply computing skills using unfamiliar hardware	Identify how using different hardware can increase



	<p>hardware for different purposes. Begin to use a range of software for different purposes.</p>	<p>different ways to collect data. Use different types of software and identify their purposes.</p>	<p>successfully complete a project.</p>		<p>to solve a problem successfully. Apply computing skills to create content using unfamiliar programs or apps.</p>	<p>creativity and productivity. Identify how a new piece of software or an app can increase creativity.</p>
Nature (real world)	<p>Observe how collected data can be represented electronically.</p>	<p>Use data handling skills to represent data digitally.</p>				
Place and Space	<p>Recognise the ways digital technology can be used in the classroom, home and community.</p>	<p>Recognise some uses of the internet, in simple terms and some of its benefits and drawbacks. Recognise why digital technology is used in the classroom, home and community.</p>	<p>Use appropriate tools (software, websites and apps) to collaborate and communicate safely online. Use digital technology in different ways in the classroom, home and community.</p>		<p>Select, use and combine appropriate technology to create a solution that will have an impact on others.</p>	<p>Combine a range of technology to achieve a particular outcome.</p>
Comparison	<p>Search for or retrieve digital content, including images and information, in digital folders and online, with supervision.</p>	<p>Recognise and demonstrate that some information can be found online and some offline.</p>	<p>Explain that the World Wide Web contains lots of web pages about different subjects that can be searched.</p>			<p>Critically evaluate search engine results and identify factors that may affect ranking, such as how long the site has existed, the number of links to the site and whether the organisation has paid to have their site promoted.</p>