Nether Stowey CE VC Primary School

Computing Policy 2024

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Introduction:

This policy expresses the school's purpose for the teaching and learning of Computing. It sets out the aims; planning of the curriculum and assessment and monitoring. It will be reviewed on *(09/2025).*

Intent

Technology is becoming an everyday part of life. At Nether Stowey Church of England VC Primary School, we hope to prepare our children for a future in an environment which is shaped by technology. Therefore, we want to model and educate our children on how to use technology positively, responsibly and safely. We aim to encourage our pupils to be creators not consumers and our curriculum encompassing computer science, information technology and digital literacy reflects this. We want our pupils to understand that with technology comes choices, as a school we want to model and support these positive choices and highlight the risks that may possibly come by making incorrect ones.

We encourage staff to try and embed computing across the whole curriculum to make learning creative and accessible for all children. We want children to become fluent with a range of tools to best express their understanding. We want children to feel comfortable and confident with using and exploring these tools independently by the time they reach Upper Key Stage 2.

Implementation

The computing curriculum at Nether Stowey Church of England VC Primary School aims to equip children with the knowledge, skills and understand they need to thrive in the digital world they will be a part of both today and in the future. The curriculum can be broken down into three strands: computer science, information technology and digital literacy.

Foundation Stage

Despite computing not being explicitly mentioned within the Early Years Foundation Stage (EYFS) statutory framework, we will ensure that children in EYFS are exposed to a wide range of play-based experiences that support the teaching of computing.

-Pupils build confidence to use technology purposefully to support their learning for all Early Learning Goals as appropriate.

-Pupils in Foundation Stage class will have experiences using technology indoors, outdoors and through role play in both child-initiated and teacher-directed time.

-The Foundation Stage teacher uses the Somerset Continuous provision map to plan for technology in a range of contexts.

The use of Barefoot computing resources which develop a wide range of computing concepts and approaches can be used to supplement anything that is already in place for Early Years. We aim to prepare children for studying the computing curriculum in KS1.

KS1 –

Pupils will be taught to:

- Understand what algorithms are, and how they are implemented.
- Create and debug simple programs.
- Predict the behaviour of simple programs.
- Create, organise, store, manipulate and retrieve digital content.
- Recognise common uses of ICT beyond school.
- Use technology safely and respectfully, keeping personal information private, and to identify where to go for help and support

when they have concerns online.

KS2 –

Pupils will be taught to:

• Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems, and solving problems.
• Use sequence, selection, and repetition in programs.
• Work with variables and various forms of input and output.
• Explain how some simple algorithms work, and how they can detect and correct errors.
• Understand computer networks, how they can provide multiple services, and the opportunities they offer for communication and collaboration.
• Use search technologies, understand how results are selected and ranked, and be able to critically evaluate digital content.
• Select, use and combine a variety of software on a range of devices to design and create programs, systems and content that accomplish specific goals.
• Use technology safely, respectfully and responsibly, recognise acceptable behaviour and identify a range of ways to report online concerns.

NCCE

Our scheme of work for computing is the 'Teach Computing' Curriculum and covers all aspects of the National Curriculum. This scheme was chosen as it has been created by subject experts and based on the latest pedagogical research. It provides an innovative progression framework where computing content (concepts, knowledge, skills and objectives) has been organized into interconnected networks called learning graphs. The scheme is regularly updated and offers a feedback service that could also result in changes.

In KS2 we will continue to use Google Classroom, which has played a key role during home learning as children can access work through this app at home. By using this app, we can collect and store work in one place, it allows children to save work produced on Chromebooks. Homework is also being set through this app in some classes and parents can see the work that children have saved. KS1 have chosen to record their work using a range of different methods such as Google Drive, photos and recording children's comments.

Project Evolve – Digital Literacy

A key part of the computing curriculum is ensuring that children are accessing technology safely and responsibly. Children have a right to enjoy childhood online, to access safe online spaces and to benefit from all the opportunities that a connected world can bring them, appropriate to their age and stage. Children develop this awareness and responsibility through the use of the 'Project Evolve – Education for a Connected World' framework. The framework aims to support and broaden the provision of online safety education, so that it is empowering, builds confidence and creates a positive online environment.

Within each year group topics include:

• Self-Image and Identity - This strand explores the differences between online and offline identity beginning with self-awareness, shaping online identities and media influence in propagating stereotypes. It identifies effective routes for reporting and support and explores the impact of online technologies on self-image and behaviour.

• Online Relationships - This strand explores how technology shapes communication styles and identifies strategies for positive relationships in online communities. It offers opportunities to discuss relationships, respecting, giving and denying consent and behaviours that may lead to harm and how positive online interaction can empower and amplify voice.

• Online Reputation - This strand explores the concept of reputation and how others may use online information to make judgements. It offers opportunities to develop strategies to manage personal digital content effectively and capitalise on technology's capacity to create effective positive profiles.

• Online Bullying - This strand explores bullying and other online aggression and how technology impacts those issues. It offers strategies for effective reporting and intervention and considers how bullying and other aggressive behaviour relates to legislation.

• Managing Online information - This strand explores how online information is found, viewed and interpreted. It offers strategies for effective searching, critical evaluation of data, the recognition of risks and the management of online threats and challenges. It explores how online threats can pose risks to our physical safety as well as online safety. It also covers learning relevant to ethical publishing.

• Health Well-being and Lifestyle - This strand explores the impact that technology has on health, well-being and lifestyle e.g. mood,

sleep, body health and relationships. It also includes understanding negative behaviours and issues amplified and sustained by online technologies and the strategies for dealing with them.

• Privacy and Security - This strand explores how personal online information can be used, stored, processed and shared. It offers both behavioural and technical strategies to limit impact on privacy and protect data and systems against compromise.

• Copyright and Ownership - This strand explores the concept of ownership of online content. It explores strategies for protecting personal content and crediting the rights of others as well as addressing potential consequences of illegal access, download and distribution.

Computing is taught at last once a fortnight, either as a stand-alone lesson or embedded into the wider curriculum. This is dependent on the area of focus for that specific half term.

Children have access to a range of hardware: laptops, Chromebooks, programmable equipment (MicroBits, BeeBots, dataloggers) and software that they need to develop knowledge and skills of digit systems and the applications. We also have access to our local computing hub we we can access addition equipment free of charge.

Impact

We encourage our children to enjoy and value the curriculum we deliver. We want children to discuss, reflect and appreciate the impact computing has on their learning, development and wellbeing. The quality of children's learning is evident through their recorded work and pupil voice. Much of the subject-specific knowledge developed from our computing curriculum equip pupils with experiences which will benefit them in secondary school, further education and future workplaces. We want children to be confident

using technology, but also recognise the impact and implications it can have if used inappropriately.

Assessment

Pupils' knowledge and understanding of the primary computing curriculum will be assessed according to the provisions outlines in our Assessment policy. Ongoing formative assessment monitors pupil performance and progress during learning; the outcomes of which we will use to ensure that work matches the individual needs and abilities of pupils. Summative assessment reviews pupils' progress and abilities and will be undertaken at the end of each unit, term and school year.