Computing Policy

Meare Village Primary School

Subject Lead:	Andrew North
Approved by:	Headteacher
Last reviewed on:	July 2023
Next review due by:	July 2024

Intent and aims

Technology is everywhere and will play a pivotal part in pupils' lives. We want to model and educate our pupils on how to use technology positively, responsibly and safely.

We want our pupils to be creators—not merely consumers, and our broad curriculum reflects this.

We want our pupils to be able to operate in the 21st century workplace, and to know the career opportunities that will be open to them if they study computing.

Through our computer science lessons we want our pupils to develop creativity, resilience, problem-solving, and critical thinking skills.

By the time they leave Meare, children will have gained key knowledge and skills in the three main areas of the computing curriculum: computer science (programming and understanding how digital systems work), information technology (using computer systems to store, retrieve and send information) and digital literacy (evaluating digital content and using technology safely and respectfully).

In order that our children can reflect on their learning thematically and to find threads that interweave throughout their experiences, we encourage them to consider and discuss which of our three ‘golden threads’ the theme they are discovering could be linked to: power, culture and/or people and places.

Curriculum

We base our computing curriculum around the DfE’s NCCE scheme, ensuring full coverage of the 2014 computing curriculum. We particularly value the NCCE planning as the knowledge and skills taught in KS1 & KS2 progress seamlessly into KS3 and beyond. We supplement the NCCE resources with material from organisations such as Barefoot Computing, RaspberryPi.org, Code.org, and materials created by our computing coordinator, ensuring our pupils have enjoyable and engaging computing lessons.

In addition to discrete computing lessons, our teachers embed computing across the whole curriculum to make learning creative and accessible.

Internet Safety

It is the responsibility of all staff to ensure children use the internet safely and are taught about online safety. E-Safety is incorporated throughout the NCCE scheme, and additional E-Safety lessons from ‘Project Evolve’ are delivered by class teachers in PSHE sessions.

Weekly ‘E-safety starters’ at the beginning of Tuesday assemblies are used to refresh children’s online safety awareness, and to alert children to new potential threats (particularly scams).

The school supports the international Safer Internet Day each February and provides opportunities for pupils to consider cyberbullying as part of Anti-Bullying week in the Autumn term.

The DSL (through our filtering service SAFETYNET) receives a weekly report on internet searches conducted by children and adults who use school devices. Concerning searches will be investigated by the DSL. Immediate alerts will be sent to the DSL by email if an internet search is deemed very serious and that puts a child in potential harm.

Resources

- Initially set up to support learning during lock-down, Google Classroom has become an integral part of computing at Meare.
- We have more than forty Chromebooks that are used to support learning in all subjects. In addition to Chromebooks, we have twenty netbooks, enabling children to gain experience using Windows apps. Each class also has several iPads.
- Online tools such as Scratch, Tinkercad, Kodu, code.org and Logo/Turtle Academy are all part of the experience of pupils.
- We recognise the importance of giving pupils the opportunity to run their programs on physical devices, and to that end have acquired forty BBC micro:bit development boards, on which children run programs written both in MakeCode (a visual, block based programming tool), and Python (a versatile written programming language). These micro:bits are used to control a number of Bibot XL and Robobit MK3 robot buggies, which we purchased in 2023.

Role of the Subject Leader

The subject leader is responsible for providing professional leadership and management of computing within the school. They will monitor standards to ensure high quality teaching, effective use of resources and improved standards of learning and achievement. This will include observation of lessons and scrutiny of the pupils' work. They will collect, analyse and distribute, where applicable, information relating to the subject to the relevant people.

Technical Support

The school receives technical support from ‘Zen Computers Ltd’ and the technician is responsible for the maintenance of computers, printers, the school network and keeping software up to date. The subject leader liaises with the technician to ensure that the systems are running efficiently.

Planning and Assessment

We have created a comprehensive progression document for staff to follow to best embed and cover every element of the computing curriculum. The knowledge/skills statements build year on year to deepen and challenge our learners.

Progress is assessed on an on-going basis using the assessment materials provided within the NCCE planning. These materials include self-assessment sheets, teacher assessment sheets and short summative assessment tests. This ensures teachers are aware of individual pupil's progress in computer science, information technology and digital literacy.

Children are encouraged to evaluate their own and others' work in a positive and supportive environment, including peer assessment.

Teacher's judgments are supported through an electronic portfolio of children's work (Google Classroom / Google Drive).

Health and Safety

- Age appropriate class and safety rules are displayed in the learning environment.
- Equipment is maintained to meet agreed safety standards.
- From Foundation Stage, pupils are taught to respect and care for technology equipment.
- Further guidance can be found in the school's health and safety policy.

SMSC Opportunities

- E-safety is incorporated throughout the NCCE planning, and we supplement this with Project Evolve E-Safety lessons.

Cross Curricular Links

- At Meare, computing and DT are very much intertwined. By the end of Key Stage 2, all pupils will have learned 3D modelling (using Tinkercad), and will have 3D-printed several of their own designs.
- Chromebooks are used to enhance childrens' learning in many other subjects, particularly Music (see our Music Policy), Art, History, Geography and English.

Equal Opportunities

The school maintains its policy of equal opportunities as appropriate for Computing.

Computers and related technology are made available to all pupils regardless of gender, race or abilities. The class teacher differentiates work by task, resource or support, to ensure the individual needs of more able and SEN pupils are met.

The school is aware that not all pupils have the same access to computers at home and this is considered by staff in the planning and delivery of the curriculum.