Computing Policy 2023

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St Cuthbert's C of E Junior School

Computing Policy

Policy History	Date
First draft	October 2017
Review	January 2019
Review FH	September 2023
Review	
Review	

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 was developed in Autumn term 2017 by the Computing subject leader Caroline Hughes through discussion with teachers and the leadership team and based on Computing programmes of study (POS): key stages 1 and 2 (*DfE September 2014*). It will be reviewed Autumn 2024.

Purpose:
We believe that an engaging and motivating Computing curriculum will enable our learners to:
- Use computational thinking and creativity to understand and change the world.
- Make deep links with mathematics, science and design and technology.
- Build knowledge of principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.
- Become digitally literate – able to use, express themselves and develop ideas through information and communication technology.

Aims:
- The Computing Subject Leader and leadership team support staff to deliver a high quality computing education.
- Computational thinking – the ability to solve problems in a creative, logical and collaborative way – is developed through repeated programming opportunities and opportunities to build understanding and apply the concepts of computer science.
- Pupils become responsible, competent, confident and creative users of information and communication technology.
- Pupils have a growing awareness of how technology is used in the world around them and of the benefits that it provides. They are supported to evaluate and use information technology, including new or unfamiliar technologies.

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- Opportunities for communication and collaboration develop understanding of the purposes for using technology and these are used to bring together home and school learning experiences.
- Technology is used imaginatively to engage all learners and widen their learning opportunities,
- Pupils have access to a variety of devices and resources and are encouraged to reflect on the choices they make to use them.

We expect our pupils to:
  - o Develop computing skills, knowledge and understanding
  - o Develop an understanding of the wider applications of computer systems and communication technology in society
  - o Develop independent and logical thinking through reasoning, decision making and problem solving
  - o Develop imagination and creativity
  - o Work independently and collaboratively

Curriculum coverage and progression:
- Planning for Computing is implemented using The National Curriculum Programme of Study for Computing
- Long term planning has been developed using the National Centre of Computing Education Progressions and demonstrates coverage and progression of the attainment expectations at the end of Key Stage as identified in the Computing POS.
- Medium term planning takes account of differentiation and progression and is based on NCCE progressions in Programming, e-Safety, Computing systems and networks, Creating Media, Data and Information.
- Exemplification planning by the NCCE has been used to support short term planning.
- The computer science aspects of Computing are taught discretely through the Programming and Computing systems and networks lessons.
- Key skills in information technology are developed through Creating media and Data and Information threads and are integrated into learning in other curriculum areas.
- E-Safety is developed through PSHE and, together with the threads throughout all computing lessons, builds the skills and understanding of Digital Literacy.
- Opportunities for technology as a tool to support learning and teaching in all areas are identified in curriculum planning.

Assessment:
- Progress is assessed on an on-going basis using the NCCE assessments for each thread of Computing. This ensures teachers are aware of individual pupil's progress in computer science, information technology and digital literacy.
- Formative assessment is used by the class teacher and teaching assistant during whole class or group teaching. Children's confidence and difficulties are observed and use to inform future planning.
- Each class teacher maintains a record, indicating pupils that are working beyond or below age-expected attainment. This is passed on to the next class teacher.

- Children are aware of the 'I can' statements and are encouraged to set success criteria for their work.
- Open questions are used to challenge children's thinking and learning.
- 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 evidence which provides examples of age-expected attainment.
- Information is shared with the school community through the school website, display, celebration events, newsletters, and end of year reports.

e-Safety:
- A progressive e-Safety curriculum ensures that all pupils are able to develop skills to keep them safe online.
- Opportunities for learning about e-Safety are part of PSHE and reinforced whenever technology is used.
- Clear rules for e-Safety are agreed by each class at the beginning of every year.
- Parents and pupils sign an acceptable user policy together when a pupil first starts at the school. The class rules are then signed annually by pupils and shared with parents.
- In addition, the Project Evolve scheme is used to ensure progression and coverage focusing on 6 key areas of self-image and identity, online relationships, online reputation, online bullying, managing online information, health, wellbeing and lifestyle.
- E-Safety is woven into all computing lessons and in particular Privacy, security, copyright and ownership are specifically covered in computing lessons.
- 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.
- Opportunities are taken whenever possible to reinforce messages of a healthy life style.
- The school has an e-safety policy in place that details how the principles of e-safety will be promoted and monitored.

Monitoring:
- The impact of the Computing curriculum is monitored regularly by the Computing subject leader through pupil discussion, samples of work and discussion with teachers, an electronic portfolio and the use of the NAACE Self Review Framework.
- Systematic monitoring of all threads of Computing informs the subject leader and school development plan.
- The Computing leader conducts regular audits of the training needs of teachers and teaching assistants to improve their subject knowledge and confidence. Requests for training in Computing can be part of individual teacher's performance management plan.

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.

Resources:
- The school has a range of resources to support the delivery of the Computing curriculum and learning across all areas of the National curriculum.
- Online tools such as (*ClassDojo, Numbots, TTRockstars, Scratch,*) are part of the experience of pupils.
- Hardware resources include data loggers, Crumble, Micro:bit.
- The Computing subject leader keeps up to date with new technologies and reviews the school's provision, as well as maintaining the existing resources in partnership with the school's technology support provider.
- Hardware and software faults are reported to the school's computer technician.
- The Computing Action Plan expresses the school's priorities for future expenditure and is reviewed by the Computing subject leader, governors and senior management who consider its impact on all learning.
- Governors and senior management ensure that they achieve value for money by implementing the principles of best value in evaluating, planning, procuring and using technology.
- Old resources are disposed of in line with Somerset County Council's environmental disposal policy and the school's data protection policy where these are applicable.

Roles and responsibilities:
- The school community works together to ensure the implementation of the Computing policy.
- The subject leader is responsible for monitoring curriculum coverage and the impact of learning and teaching; and assists colleagues in its implementation.
- Subject leaders in other curriculum areas are responsible for recognising the links between computing and English, Mathematics, Science and foundation subjects; and planning to use these to support learning across the school.
- The Computing subject leader provides an annual report to governors on the impact of the Computing curriculum and how resources are being effectively deployed. Governors may include Computing in their learning walks around the school.
- The class teacher is responsible for delivering an effective Computing curriculum and integrating this into their planning for other subject areas where this is appropriate.
- The school receives technical support from SoftEgg 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.

Health and safety:
- Age appropriate class and safety rules are displayed in the learning environment.
- Equipment is maintained to meet agreed safety standards.

- Pupils are taught to respect and care for technology equipment.
- Further guidance can be found in the school's health and safety policy.

Review:
- This policy will be reviewed annually by the Computing subject leader and leadership team and shared with the school community.