



Corbridge C of E First School **Computing Policy**

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 *Summer term 2020* by the Computing subject leader *Charlotte Sommerville* through discussion with teachers and the leadership team and based on Computing programmes of study (POS): key stages 1 and 2 (*DfE September 2014*).

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

Curriculum coverage and progression:

- Planning for Computing is implemented using the National Curriculum Programme of Study for Computing.
- Long term and medium term planning has been developed using the Purple Mash Scheme of work.
- This scheme demonstrates coverage and progression of the attainment expectations at the end of Key Stage 1 and Key Stage 2, as identified in the Computing POS.
- The scheme sets out a plan for each the delivery of the Computing Curriculum for an academic year and includes:
 - Coverage of the three Computing strands; Computer Science, Information Technology and Digital Literacy.
 - Nine units of work for each year group. The number of lessons per unit differ on based on the topic.
 - Teacher Guides and video tutorials to support teachers who may not be familiar with the apps/software recommended.
 - Details of all the resources you will need to deliver the projects.
 - Links against the national computing curriculum objectives.
 - Cross curricula links for each plan is included.

Assessment:

- Progress is assessed on an on-going basis using a whole class electronic tracking system, provided by Purple Mash.
 - The tracker clearly labels the three core strands (Computer Science, Information Technology and Digital Literacy), it links with the National Curriculum and it also cross references with the Purple Mash unit number.
 - The tracking system ensures Computing subject lead is aware of children working below expected level, at expected level and working in greater depth in computer science, information technology and digital literacy.
 - Formative assessment is used by individual class teachers during whole class or group teaching. Children's confidence and difficulties are observed and use to inform future planning.
 - This record indicates pupils that are working beyond or below age-expected attainment. This information is passed to the Computing subject lead and to the next class teacher.
 - 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.
 - Information is shared with the school community through whole school topics such as 'Safer Internet Day', displays, newsletters, and end of year reports.
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Early Years:

- 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.

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.
- 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 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 and analysis of assessment data.
- 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, the Early Years Framework and learning across all areas of the National curriculum.
 - 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 logged by members of staff in a file kept in ICT suite.
 - 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.
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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.
- Although the Computing subject lead is responsible for delivering an effective Computing curriculum, it is up to the individual class teachers to integrate Computing into their planning for other subject areas, where this is appropriate.
- The school receives technical support from a Northumberland County Council representative and their support can be requested regarding 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.
- 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.

Review:

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