



## Computing Policy

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| Audience:               | Parents<br>School staff<br>Local Governing Bodies   |
| Approved:               | Sept 2020   |
| Other related policies: | Acceptable Use Policy, E-Safety Policy, Social Media Policy, Teaching and Learning, Computing |
| Policy owner:           | Debbie Conroy   |
| Policy model:           | Newhall   |
| Review:                 |   |
| Version number:         | 1   |

## Introduction:

At Sir Martin Frobisher Academy 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.
- 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 two core documents: the National Curriculum Programme of Study for Computing and the Statutory Framework for Early Years Foundation Stage
- Long term planning has been developed using the Somerset eLIM Computing Progressions and 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.
- Medium term planning takes account of differentiation and progression and is based on Somerset progressions in Programming, e-safety, Multimedia, Handling Data and Technology in our Lives.
- Exemplification planning by the Somerset Wessex Computing Project has been used to support short term planning.
- The computer science aspects of Computing are taught discretely through the Programming and Technology in our Lives threads of Somerset's computing model.

- Key skills in information technology are developed through Multimedia and Handling Data threads and are integrated into learning in other curriculum areas.
- E-safety is developed through PSHE and, together with the threads of Technology in our Lives and Multimedia, 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 Somerset 'I can' statements 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 used 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.

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

## Online safety:

- A progressive online safety curriculum ensures that all pupils are able to develop skills to keep them safe online.
- Opportunities for learning about online safety are part of PSHE and reinforced whenever technology is used.
- Clear rules for online 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.
- 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 online safety policy in place that details how the principles of online 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.
- 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 Learning Support 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 confident 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. We maintain a list of resources used in each phase.
- Online tools such as Scratch are part of the experience of pupils.
- 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 the class teacher in a file kept in the school office.
- The Computing Action Plan expresses the school's priorities for future expenditure and is reviewed by the Computing subject leader, governors and senior leadership who consider its impact on all learning.
- Governors and senior leadership 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 local 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 REAch2, who are 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.
- 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.