ST MARGARET'S COLLIER STREET SCHOOL

Computing Policy

Rationale

Computing lessons aim to make pupils digitally literate, expressing and presenting their ideas using a range of information and communication technology and becoming confident in an ever more digital world.

Aims

- To enable all children to use information and communication technology competently and with confidence.
- To enable all children to understand the main principles of computer science.
- To enable all children to analyse and solve computational problems.
- To enable all children to evaluate the use of information and communication technology.
- To meet the requirement of the National Curriculum as fully as possible and to enable all children to reach the highest possible standards of achievement.
- To create responsible users of information and communication technology.

Objectives

These objectives are derived from the aims and guide our decisions in planning a scheme of work. They will form the basis for evaluation and assessment.

To enable all children to competently use information and communication technology with confidence.
- By ensuring opportunities to use a range of new and unfamiliar technologies.

To enable all children to understand the main principles of computer science.
- By providing opportunities to use different technologies to create simple programs, systems and a range of content.

To enable all children to analyse and solve computational problems.
- By providing opportunities to use algorithms and identify and correct errors within programs.

To enable all children to evaluate the use of information and communication technology
- By providing opportunities to experiment with a wide range of programs and technologies and encouraging discussion about their systems and their purpose.

To meet the requirement of the National Curriculum as fully as possible and enable all children to reach the highest possible standards of achievement
- By intervening, where appropriate, to reinforce an idea or teach a new point.
- By planning activities which allow different levels of achievement or incorporate possibilities for extension work.
- By promoting a continuous programme of staff development.

To enable all children to become creative users of information and communication technology.
- By allowing pupils freedom to be creative in some tasks.
- By planning tasks which allow skills to be carried across topics and subjects.

To create responsible users of information and communication technology.
- By embedding an understanding of e-safety throughout the curriculum.
- By encouraging pupils to identify acceptable and unacceptable behaviours.
- By identifying different ways in which to report concerns about content and behaviour.
- By promoting e-safety through pupil ambassadors 'E-safety Owls'.

Principles of Teaching and Learning

Differentiation and AEN
Pupils with additional educational needs will be entitled to the same access to computing as their peers. In planning lessons, teachers will identify the learning goals for the majority of children as well as extension activities for the more able. Consideration will be given to modifying the task, or providing peer or adult support, for children with difficulty. It is important to note that pupils with learning difficulties may achieve well in computing and should be given every opportunity to provide support for others.

Computing can be used as a tool to aid children with AEN , and teachers will therefore liase with the SENCO on the use of Computing to improve the involvement of AEN children in both the Computing curriculum, and indeed in other curriculum areas. For instance, to improve writing and presentation in Literacy and as a means of support with phonics and reading.

Breadth and balance
Lessons taught will cover three main areas: computer science, digital literacy and information technology. Teachers and support staff (where appropriate) will ensure that they understand the skills and concepts to be taught and the role of discussion in developing a critical awareness of the use of computing. The scheme of work for computing will provide guidance on the skills and knowledge to be covered by each year group. Teachers will need to plan their work so that these skills are explicitly taught and that they are practiced and developed during work in other subjects.

Activities using computing will be planned to allow for different levels of achievement by pupils and to include the possibility of extension work. Teachers will be expected to intervene where appropriate to reinforce an idea or teach a new point.

Variety
Pupils will have the opportunity to participate in a variety of activities to learn to use computing and apply these skills in meaningful contexts, including: -

- Short directed activities to practice a specific skill or become familiar with the controls for a new technology.
- Activities with a subject context to develop skills previously learned.
- Open ended activities which allow pupils to be more creative.

- Whole class discussions to allow reflection on the use of computing and to share learning and techniques.

Relevance
At a level suitable to their age group, pupils will learn how technology can support or benefit them in their daily lives and how to express themselves well through a range of information and communication technologies.

Cross-curricular skills and links
Clear links will be made between computing and other curriculum areas such as maths and science. The digital literacy section of the curriculum will enable children to express and develop their ideas in a range of other subjects.
An online teaching programme is used for maths which enables teachers to regularly set online maths homework for children.

E-safety
A separate E-safety policy is available. Awareness of E-safety will be embedded within computing lessons, encouraging pupils to make informed choices when using the internet, digital systems and different technologies.

Equal opportunities
All children are entitled to equal access to all computing equipment in order to develop their personal computing capability. When children work in groups care will be taken to ensure that all children are active and have equal access to equipment.

Children with a computer at home are encouraged to use it for educational benefit. School laptops will be made available during school time to pupils without a home computer so that they are not disadvantaged in homework tasks.

Health and safety
Children are encouraged to close computers down and prepare them for use. Where possible they have chairs of the correct height, eyes level with the top of the screen, and be encouraged to sit comfortably and use both hands for the keyboard. Pupils are encouraged to take regular breaks to prevent eye strain and repetitive strain injuries.

Assessment, recording and reporting
Pupils are assessed across the 3 main strands of computing: digital literacy, computer science and information technology. Teachers assess through observation and discussion within lessons and through using completed computing tasks. Assessment evidence for pupils is stored digitally as well as sampled paper copies to inform overall judgements. In KS1, paper copies of work created throughout a term will be kept for assessment evidence. These will be shared and passed on to the next teacher. Assessment judgements will be guided by the Kent Tracking statements.

Management and administration
The curriculum will be planned to allow pupils a wide range of activities to cover and teach the programmes of study for computing. Teachers will use the key stage plans to ensure that pupils have sufficient access to experiences and equipment to receive a balanced experience of computing and that progression is achieved across the key stages.

Both the scheme of work for computing and other subject schemes of work will provide the basis for termly planning showing learning objectives, experiences and types of activities. Planning should identify opportunities for assessment and programs and technologies used to ensure full coverage.

The role of the Subject Leader
The subject leader will work with the school management team to ensure implementation of the school's computing policy. The subject leader will be responsible for monitoring curriculum coverage and the quality of teaching and learning. The manager will plan and lead the development of all school staff in computing and provide regular reports on the level of resources. The subject leader will identify and plan training for whole staff and support staff in embedding the use of computing into their everyday teaching.

Resourcing
See the annual development plan which shows planned expenditure and developments.

Review
This policy will be reviewed every two years to evaluate the school's progress towards its computing targets. Progress will be discussed with the headteacher and reported to the governors.

This evaluation will inform the action plan which will then inform the school development plan.