# Computing



"Every Child, Every Chance, Every Day"



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## St Marks CE Primary School Policy for Computing

Governors and staff are committed to delivering the very best for our children. Our Vision is fundamental to our role as a Church of England School with its roots coming from the original blessing and verse presented to our school on its official opening in 1955.

# Thy word is a lamp to my feet and a light to my path.

Psalm 119 Vs 105

The following five components describe the desired outcomes we offer through it.

- Together, we will prepare you for life and learning
- Together, we will teach you to live within the values of God's word
- Together, we will safely lead you on your journey
- Together, we will guide you to a fulfilling future
- Together, we will forever help you to grow in confidence

### Introduction

This document is a statement of the aims, principles and strategies for the use of Computing at St Mark's CE Primary School. It was developed during the Autumn Term 2016. This policy will be regularly reviewed by the computing co-ordinator during the Spring term every two years.

### What is computing?

Computing comprises a variety of systems that handle electronically retrievable information. Computers are the most obvious of these but computing also includes interactive whiteboards, programmable robots, Easi-speak recorders, projectors, calculators, data loggers, visualisers, CD players, video, digital cameras, iPads and programmable hardware.

### Principles for the use of Computing

Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems.

The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content.

Computing also ensures that pupils become digitally literate - able to use, and express themselves and develop their ideas through, information and communication technology - at a level suitable for the future workplace and as active participants in a digital world.

### Rationale

### Why teach COMPUTING?

Computing is a part of children's everyday lives and they need to be given a Computing curriculum which allows them to harness the power of technology and use it both purposefully, creatively and safely.

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It enables them to find, explore, analyse, exchange and present information responsibly, creatively and with discrimination. It also enables rapid access to ideas and experiences from a wide range of cultures and belief systems, enriching children's understanding of themselves and others.

### Aims

### Our aims in using Computing are that all children will...

Access a relevant, challenging and enjoyable curriculum for Computing for all pupils. Together, we will prepare you for life and learning

- Meet the requirements of the national curriculum programmes of study for Computing. Together, we will guide you to a fulfilling future
- Use computing as a tool to enhance learning throughout the curriculum. Together, we will forever help you to grow in confidence
  - Have the opportunity to access new developments in technology. Together, we will guide you to a fulfilling future

• Leave St Mark's with the confidence and capability to use Computing throughout their later life. Together, we will guide you to a fulfilling future

- Use computing to enhance learning in other areas of the curriculum using Computing. Together, we will forever help you to grow in confidence
- Develop the understanding of how to use Computing safely and responsibly. Together, we will prepare you for life and learning

Together, we will teach you to live within the values of God's word Together, we will safely lead you on your journey Together, we will guide you to a fulfilling future Together, we will forever help you to grow in confidence

### Computing - Teaching and Learning

Computing is taught both as a distinct subject and is also seen as a tool to be used as appropriate throughout the curriculum to support and enrich children's learning.

At St Mark's we aim to incorporate COMPUTING within as much of our teaching (as appropriate) as possible. The use of Interactive White Boards within each class enables us to meet the learning styles of all of our children whilst providing a broad and balanced curriculum. This ensures that all curriculum areas have variety and a range of experience. As well as being a teaching tool, Interactive White Boards are a learning resource for the children to use during lessons.

### The new national curriculum for Computing aims to ensure that all pupils

• Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication.

• Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.

• Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.

• Are responsible, competent, confident and creative users of information and communication technology.

### Curriculum and Planning for Computing and Scheme of Work

Computing use is integrated in the teaching and learning of all subject areas throughout the school.

Each year group offers children experience in each of the four areas of Computing in the national curriculum, except for Reception, where experiences in Computing are linked specifically to the early-learning goals.

Computer use is carefully managed so that all pupils are given equal access opportunities (each child uses a computer at least once a week).

As the school develops its resources and expertise to deliver the Computing curriculum, modules will be planned in line with the national curriculum and will allow for clear progression.

Modules are designed to enable pupils to achieve stated objectives. Pupil progress towards these objectives will be recorded by teachers as part of their class recording system. Staff will follow medium term plans with objectives set out in the national curriculum.

We use LGFL (London Grid for Learning) and purple mash.

The Computing modules taught at St Mark's are constantly changing as the range of tech on offer to primary schools are also changing. The schools Computing co-ordinator is in regular contact with Islington. We schedule six visits per year from a lead teacher and three co-ordinator meeting per year to discuss, evaluate and adapt what the children are being taught.

### Assessment - recording and reporting

### Procedures for assessment:

• Assessment is used to guide the progress of individual pupils in their use of Computing. It involves identifying each child's progress relating to key skills and use of vocabulary, determining what each child has learned and what therefore should be the next stage in his/her learning.

- Each half term teachers' medium term plans are assessed and pupil progress discussed. A portfolio of work for each year group is compiled every year to show progression across the school and help teachers to better understand what pupil progress looks like within Computing.
- Reporting to parents is feedback annually through a written report. Reporting on computing use will focus on each child's ability to use a computer with confidence and competence across a variety of applications.

### Equal Opportunities/Access to Computing

Computing is an entitlement for all pupils and is seen as fundamental to children's learning needs.

Priority will be given to ensure equality of access and high quality computing experiences for all pupils irrespective of race, gender, disability, age or class to develop their own level of computing capability.

We ensure that all our pupils:

- 1. Have equal access to Computing resources
- 2. Have equal opportunities to develop Computing capability
- 3. Use software and hardware, which are appropriate to their ability

### Pupils with Special Educational Needs and Disabilities (SEND)

Pupils with Special Needs and Disabilities have the same computing entitlement as all other pupils and are offered the same curriculum. However particular applications of computing are used for pupils with difficulties in learning, who may need to practise basic skills regularly and intensively. This includes for example, the use of Neo word processors for children who find writing difficult.

As pupils progress through the school they are given increasing control of their use of computing, gaining growing independence in their use of computing as a tool appropriate to any given activity and in their choice of software required.

The school also allows for community use of its computing facilities and expertise wherever possible. Current arrangements include:

- The laptops and iPads are used as a part of SWES.
- The school has provided the use of the laptops for parents' basic skills classes.
- In conjunction with Islington, we have provided online safety workshops for parents.

### Safeguarding and E-safety

Computer systems will not be placed near magnets, radiators or have trailing wires.

Pupils will not normally work in front of a computer screen for more than an hour at a time.

We will always be mindful of relevant health and safety issues and endeavour to continually improve the computing learning environment.

Other health and safety issues in ICT that are considered include:

- The setting up and moving equipment.
- Establishing appropriate working conditions.
- Ensuring general electrical safety.
- Repairing equipment.
- The safe disposal of equipment to conform to EC directives.

The safety and welfare of our pupils when online at school and at home is taken very seriously at St. Mark's. The SMT and Computing Coordinator have taken a proactive approach in informing and educating staff, pupils and parents in this wide and everchanging nature of computing. A separate policy including guidelines and procedures has been created outlining provisions made to ensure that all aspects of the school are catered for. Each Year group teaches half termly lessons on E-safety through PSHE & C and computing where pupils are given access to the '*Thinkuknow*' website to consolidate what they have learnt. We also have access, though our links with Islington, to the most up to date online safety advice, resources and planning.

All internet/e-mail usage requires full adherence to the school's "Acceptable Use Policy" and should be fully supervised in both lessons and in clubs. All parents and pupils are asked to sign a consent form within the Home School Agreement relating to safe Internet use when their child joins the school.

Staff are encouraged to use computers at work and at home in order to prepare resources or to develop personal competence and confidence in the use of computing. All staff have full access to the school's facilities for professional use. Every member of staff has a personal e-mail address for which they receive school notices, agendas etc and an encrypted memory stick to ensure data is secure. In-house support is available through the school technician and computing coordinator and borough training is available where development is needed.

Staff are not permitted to use their own cameras or mobile phones to take images. All teachers have a school iPad, class camera and access to the iPads children use. Images taken in school are kept on classroom computers until no longer needed (usually at the end of a school year).

### Management of Hardware and Software

### Purchasing:

Hardware and software for the development of computing capability will be recommended for purchase by staff and the computing leader in consultation with the Headteacher. Software for the development of specific subject areas is the responsibility of the leader for each curriculum area who will liaise with the COMPUTING Leader.

### Organisation of Hardware

The school has two laptops trolleys. One in the Phase 3 sun beams room with 30 laptops and one in the Phase 2 cloakroom with 15 laptops. We have a set of 30 iPads which all classes have access to and are kept on the Phase 3 corridor. We also have one trolley with 30 chromebooks.

Every classroom is equipped with its own IWB and teacher's computer and there are an additional two IWBs within the school.

The school has a pupil to computer ratio of 1:6, which is in line with the expected ratio.

The asset register is maintained and annually updated to keep a record of this. We also have a bank of laptops for whole class use.

### Resources

Location of Resources:

Central resources are the responsibility of the computing co-ordinator.

All equipment is stored overnight in locked rooms. Staff have access to the laptop and iPad trolleys throughout the day but they must lock the trolley and return the key to the office after equipment is returned.

### Security of Resources

All items of computing should have the schools name marked on them including the schools address and postcode.

Any items removed from school must be reported to the computing co-ordinator and head teacher.

### Trouble Shooting

Technical faults should be reported via email to Islington Schools ICT support team. They will then decide whether they can solve the problem remotely or if they need to send a technician to school.

### The Role of the Computing Coordinator

### The role of the coordinator is to:

- Take the lead in policy development and strategies for the provision of the computing curriculum, designed to ensure progression and continuity in pupils' experience of computing throughout the school.
- Support colleagues in their efforts to include computing in their development of detailed work plans, in their implementation of those schemes of work and in assessment and record keeping activities.
- Monitor progress in computing and advise the Headteacher on action needed.
- Take responsibility for the purchase and organisation of central resources for computing.
- Ensure that appropriate technical support is available to colleagues. The coordinator will act as a link between staff and technical support.
- Advise colleagues in their use of computing in the classroom and provide appropriate INSET and resources.
- Take appropriate steps to keep up-to-date with developments in this rapidly changing field and pass on information to colleagues as appropriate.

Reviewed and ratified by Governing body	Summer Term 2019		
Next Revision (Please highlight as appropriate)	Annual	<b>Biennial</b>	Tri-annual
To be reviewed	Summer Term 2021		