

LYDIARD MILLICENT CE PRIMARY SCHOOL AND RIDGEWAY FARM CE ACADEMY

COMPUTING POLICY

Member of staff responsible	Paula Kilkelly
Committee responsible	Performance
Date agreed with staff	February 2018
Date agreed with parents	
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Frequency of policy review	Every 3 years
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Document Version Control

Issue Number	Issue Date	Summary of changes
1.2	February 2010	Assessment and Recording section - section added about KS2 'Record of Achievement' folders (page 5). How children will be grouped section - sentence added about good 'buddy' practice (suggested by pupils).
1.3	February 2013	Assessment and Recording section (p8) - updating to include eMarkbook to replace 'Record of Achievement' New section regarding safeguarding of school network and data (p9-10) Cyber-bullying added under Health and Safety (p 11) Other small changes e.g. curriculum planning (ref to scheme of work / topic planning pg7)
1.4	February 2015	Change of name to Computing Policy in line with new curriculum. Updated references to curriculum to New 2014 Curriculum. Other changes made throughout.
1.5	February 2018	<ul style="list-style-type: none"> • Change of title and footers to include both schools • Updated references to software and hardware used (page 5). • Availability of technical support (changed to 'weekly' rather than specifying the number of sessions) and reference to head teacher (page 7).

		<ul style="list-style-type: none">• Digital leader process and roles (page 6).• Reference to Rising Stars scheme of work (page 8).• Deletion of School Development Plan section (page 8).• Assessment and recording section (page 8) - TBC• Administrative use of laptops - updated reference to encryption of staff laptops (page 9).• References to 'Oakford support' replaced by 'technical support'• Use of CPOMS added (page 10)• Server information - updated by Oakford (p9-11)
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Vision Statement

We believe in the value that Computing skills can add to learning and teaching. The intelligent use of technology by teachers can have a demonstrable and positive effect upon a child's attitudes, achievement and self-esteem. We promote discussion and the sharing of good practice, engaging with new initiatives and celebrating pupils' success to help us achieve these goals:

- improve achievement
- secure entitlement for all
- enhance teaching and learning

All children learn if they are well motivated, inspired and supported. Computing devices can be an immense support to the teacher in creating an inspired, richly resourced and varied learning environment when it is used and nurtured throughout the school, in all areas and for all children.

At both Lydiard and Ridgeway schools, we want all our pupils to be autonomous users of computing devices. In a challenging world where technology is developing at an increasingly rapid rate our children will need skills in the future of which we have little concept at present. There can be no doubt that we want our children to be ready for life and learning with the confidence and ability to become fully conversant with current and future technologies and be able to adapt their skills and learning style to accommodate change. Children should also be confident in using devices in the classroom and beyond to support all aspects of their learning. In turn this will enhance the children's access to all areas of the curriculum, allowing them to fulfil their potential and realise their talents. Children must also realise the wealth of information available to them via the use of technology and need to have the skills to tap into these sources effectively.

We promote the use of computing equipment by all staff within the school to enhance their delivery of all subject areas as well as teaching the children computing specific skills. Their skills in these areas are kept up to date with on-going commitment to training.

Entitlement

Computing is part of the curriculum and is used both as a cross-curricular support and a subject in its own right.

All pupils are entitled to opportunities to use computing devices whenever it can make learning more effective.

We aim to make all children "Use computational thinking and creativity to understand and change the world", which is defined in the National Curriculum document::

"The core of 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."

This involves:

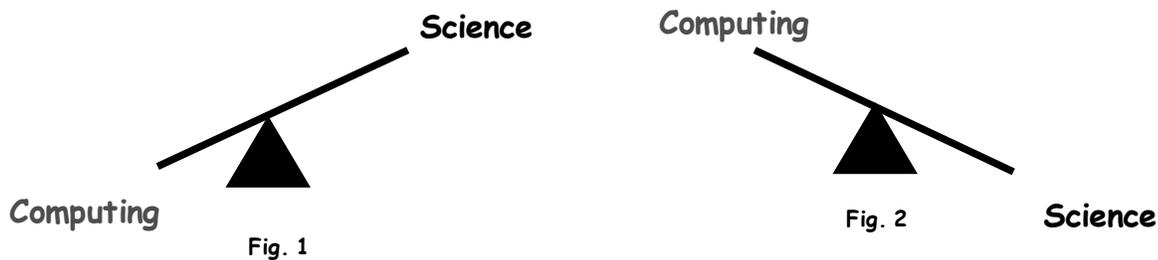
- Using computing tools and information sources to solve problems
- Using computing tools and information sources to support learning in a variety of contexts
- Understanding the implications of computing for working life and society
- Developing children's independence
- Developing familiarity with a variety of equipment and software

Pedagogy

How is Computing taught?

- Computing is used to support all areas of the curriculum through such as:
 - Online resources e.g. 'Espresso', Mathletics, Google Earth, blogging, website building, online coding, online collaboration websites, QR Codes, search engines, videos
 - Desktop software such as word processing, presentation, spreadsheet, database, art and design.
 - Computer science software and hardware such as J2e coding, Scratch and floor robots.

- Computing is used as a teaching tool and also as a learning tool by children and teachers. This is evidence in the daily use of desktop computers and mobile devices for different areas of learning.
- All Computing curriculum strands will be taught as a specific subject with links to the rest of the curriculum for the subject matter used within each topic. In lessons the focus will be the Computing skills being gained with the other subject taking a secondary role (see Fig 1). These will be taught in an interactive whole class session initially, followed by follow up activities for children to complete independently or in pairs / groups using the relevant hardware and software.
- Computing skills will be consolidated throughout their use across the curriculum during the teaching of other subjects. With these lessons the main focus will be the other subject with Computing taking a secondary role (see Fig 2).



How are children grouped?

Children will be grouped in a variety of ways to support their learning. When working in pairs children will be encouraged to share their time on the computer so that both pupils will get chance to practice the skills being learnt. Good 'buddy' practice will be taught to discourage children from 'taking over' and encourage sharing of tasks and support. Children will be taught to be autonomous and collaborative. They will work with their peers and support each other for initial help.

Roles

Computing Subject Lead

It is the Computing subject lead's responsibility to monitor the subject by:

- Sampling pupil's work to review progression and continuity
- Providing support for colleagues planning

- Disseminating Computing skills-based resources, such as web sites, equipment and software (although curriculum based software should be sourced and purchased by curriculum co-ordinators)
- Monitoring planning and teaching of Computing
- Setting targets in collaboration with the head teacher and monitoring the achievement of these
- Maintaining an up to date knowledge and understanding of Computing issues
- Planning and, where appropriate, delivering suitable INSET
- Knowing the Computing capability of the staff
- Liaising with the Senior Leadership Team on all Computing issues

Other responsibilities are shared with Head Teacher, such as:

- Planning and purchasing resources, both hardware and software
- Sourcing and managing technical support
- Lead on administrative uses of Computing (both office and teacher based uses)

Classroom Teachers

The day to day maintenance and use of classroom Computing equipment is the responsibility of the class teacher. Problems with equipment are referred to be brought to the attention of the technician (via the online helpdesk). Computing subject leader will monitor this.

Technical Support

A technician is available on a weekly basis support our systems. There is an online helpdesk system which staff can email their issues to. The technician accesses the helpdesk at the start of the visit and updates the jobs as they are complete. This sends an update to the member of staff concerned. The Computing subject leader and head teacher can monitor the helpdesk and change the priority of anything if needed.

Digital Leaders

Each year new digital leaders are appointed from Year 6 to help teachers with some of the day to day technical support. Pupils apply for these roles as part of the Junior Leadership team process. Duties include such things as: showing staff how to use new software or apps, support with software and hardware audits, support the use of technical equipment in assemblies and running internet safety assemblies.

Planning

Organisation

The National Curriculum outlines four key areas for working within Computing in line with the New 2014 Curriculum:

- Digital Literacy (Digital Research and Safety & Security)
- Creative Technology (Digital Content and Communication & Collaboration)
- Computer Science (Programming and Understanding Networks)

Curriculum Planning

Computing is taught by the class teachers throughout the school following the New 2014 Curriculum. Class Teachers follow the Rising Stars 'Switched on Computing' scheme of work; however, are able to adapt it to fit into their topics where required. Where computing is used as a teaching tool or activity in other core and foundation subjects, this is made clear on short term plans by highlighting the computing in blue.

Early Years Foundation Stage

Although computing is not a statutory separated part of the EYFS, our EYFS staff ensure that children receive a broad, play-based experience of computing through the use of new technologies. It is important to give children a broad, play-based experience of ICT in a range of contexts, including outdoor play. Our Early years learning environments feature real-life ICT experiences found in areas such as the role play. Children gain confidence, control and language skills through opportunities to 'paint' on the whiteboard or drive a remote-controlled toy. Outdoor exploration is an important aspect, supported by ICT toys such as walkie-talkie sets. Recording devices can support children to develop their communication skills.

Assessment and recording

Assessment is on-going by talking to pupils, by observing and by discussing their work with them. The children are informed of the next steps in their learning through review of their work.

Equal opportunities

Each child, regardless of age, gender, ability or social and cultural background, has an equal entitlement to Computing capability.

Special Educational Needs

Each child will have access to appropriate Computing activities that allows them to develop in their learning. This may be through support with communication to development of understanding in a particular area of the curriculum.

Laptops or iPads may be provided for children to support their writing in other lessons. This will be carried out on an individual needs basis after discussion between the head teacher and classroom teachers.

Pupil Premium Children

Money allocated to Pupil Premium Children can be used to purchase computing equipment to support their learning e.g. iPads, Dictaphones.

Gifted and Talented

Wherever possible, computing will be used to extend and challenge the more able child. For example, children may be exposed to a wider breadth of computing opportunities and deepen their understanding and extend their experience in the computing strands.

Administrative use of Computing

Administrative computers have a password-protected screen to prevent any unauthorised use and access to information. The school will promote the use of emails for distribution of newsletters and general information. Notes of absence can be accepted, but sensitive information to and from parents will be by letter. All staff will have a school email address and correspondence within school will be electronic when practical. Pupil data will be transferred electronically e.g. PLACS and annual attendance records. Any pupil documents and data sent via email will be password protected with passwords being sent separately. Staff laptops are fitted with encryption keys which encrypt data as they are logged off. CPOMS is now in full use for recording behaviour and safeguarding issues.

All teaching staff are provided with a laptop. These are all configured to access the school network (including printers) and have software installed to aid them with their classroom teaching. Software specific to their individual teaching needs will be requested by the teacher via the Helpdesk. Technical guidance can be provided by the Computer subject leader and the technician.

Server

The school has a central server on the network. The server provides the following services to both admin and curriculum users:

Security

The server controls the security of the network. All computers are added to a central security and management database called a domain. The domain enables all management to be centralized.

Classes and year groups have a restricted account with separate folders for each class, and pupil if required. Security of passwords is introduced to the children progressively with an increased level of password security from Reception up to Year 6. All members of staff have their own password protected account and from within this account can access shared staff resources, access all student work and their own private area.

Security groups are setup to provide restrictions on access e.g. Admin group have access to the school information management system (SIMS), students only have access to their software (Textease, 2Simple etc).

Additional restrictions have also been setup for the students e.g. cannot access the hard drive, cannot change computer settings.

Updates

Both Microsoft and ESET critical security updates are applied to all computers every day.

Two systems manage the update process. Windows update services (WSUS) and ESET Enterprise console are installed on the server. These systems ensure that all computers on the network are up to date with both security and anti-virus updates.

File Sharing

The server provides a central area for all files to be saved. By saving files onto the server a user can access them from any computer on the network using their user account. This eliminates the need to use USB flash drives and ensures all files are backed up every night without fail. A number of shared drives are also available to users. Security of logins is introduced to the pupils progressively across the school with password security increasing from Reception up to Year 6. Year 5 and 6 also

have the added option of individual logins and access to their own file storage. Teaching staff have access to all pupil storage areas.

The shared pupil drive allows students and teachers to share data, the shared DBAT and staff drives allows staff to share information and the admin shared drive allows admin staff to share files. Permissions are set in place prohibiting unauthorized users from accessing certain files e.g. students cannot access the staff drive or admin drive.

Remote Access

A combination of the server and firewall provides a secure way for users to access the system from home. Users have access to their files via a Terminal Server Gateway (TSGW) allowing them to connect their home computer or laptop to the school system securely.

Governors also have a drive mapped to their remote login. This has policy documents transferred to it for the governors to review. Their access is restricted to this drive only and is accessed via the TSGW connection.

ESET Anti-Virus

Anti-virus software is installed on all school machinery and is maintained by the technical support team as part of the support contract.

Backup

All of the school data is backed up automatically every night. Remote backup takes data from the server, encrypts it and sends it via a secure SSL channel over the Internet to a tier 3 data centre. The data is then replicated again to another data centre in a different location to provide another layer of redundancy. Once complete, an email is automatically sent to the school office and the technical support team to confirm that the backup has run. This backup method also provides the school with a basic level of disaster recovery and business continuity.

Health and Safety

Children are taught how to safely handle technical equipment. Computer equipment will be inspected annually. However, if potentially dangerous faults are found, they should be

reported to the subject leader and head teacher immediately and the equipment should be withdrawn from use.

When installing new equipment positioning of computers will, where possible, be informed by health and safety guidelines.

Disposal of obsolete Computing equipment will be carried out in line with EU directives.

The Internet will be used safely and in line with the Internet / Online Policy.

Cyber-bullying is taken seriously in school and is taught through PSHE and Online Safety lessons across the school. We also celebrate Safer Internet Day (SID) each year to raise the profile of such issues. Online Safety has always been part of the school curriculum and is now compulsory through the new Computing Curriculum of 2014.

Acronyms used

INSET - In-service Education & Training

PLASC - Pupil Level Annual School Census

DfES - Department for Education & Skills

BECTa - British Educational Communications & Technology agency

SID - Safer Internet Day

CPOMS - Safeguarding and Child Protection Software for Schools