MOSSCROFT PRIMARY SCHOOL

Computer Science Policy

Mosscroft Primary School

Computer Science Policy 2014

Purpose
This policy reflects the school values and philosophy in relation to the teaching and learning of Computer Science. It sets out a framework to inform and guide teaching and non-teaching staff. It gives guidance on planning, teaching, assessment, e-safety and the implementation of the new 2014 curriculum.

This policy should be read in conjunction with the 'Knowsley City Learning Centres' Computing Scheme of Work and Planning.' This scheme sets out what pupils will be taught and how Computing can facilitate and enhance work in other curriculum areas.

This document is intended for:
- All teaching staff
- All staff with classroom responsibilities
- School governors
- Parents
- Inspection teams

Copies of this policy are downloadable from the school website or in hard copy from the headteacher and subject coordinator.

Introduction
The Computer Science curriculum prepares pupils to participate in a world where access to developing technology is evolving rapidly.

We recognise that Computing is an essential life skill, which must be embedded across the curriculum. Pupils use Computing to: design and build their own software, understand and create algorithms and coding to explore, analyse and present information creatively and responsibly.

Our vision is for all teachers and learners in our school to become confident in Computing, so that they can develop the skills, knowledge and understanding to enable them to use appropriate resources effectively as powerful tools for teaching & learning.

Aims
The National Curriculum for computing aims to ensure that all pupils:
- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Can analyse problems in computational terms, and have repeated practical experience of writing computer programmes 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 commutation technology.

(Department for Education 2013)

In addition to this we aim:
- To develop a whole school approach to Computing, ensuring continuity and progression in all strands of the 2014 Curriculum.

- To use Computing as a tool to support teaching, learning and management across the curriculum.
- To provide children with opportunities to develop their Computing capabilities in all areas specified by the 2014 Curriculum.
- To ensure technology is used to improve access to learning for pupils with a diverse range of individual needs, including those with SEN and disabilities
- To demonstrate the global use of technology, by maintaining links between international and local contacts.

Objectives
- In order to fulfil the above aims it is necessary for us to ensure:
- That all teaching and non-teaching staff can recognise e-safety issues.
- That SMT give e-safety a priority across all areas of the school.
- Training in E-Safety will be accessed throughout the school.
- A continuity of experience throughout the school.
- The systematic progression through Foundation Phase & Key Stage 2.
- That the National Curriculum Programmes of Study and their associated strands, level descriptors and attainment targets are given appropriate coverage.
- That all children have access to a range of Computing resources.
- That Computing experiences are focussed to enhance learning.
- That cross curricular links are exploited where appropriate.
- That children's experiences are monitored and evaluated.
- That resources are used to their full extent.
- That resources and equipment are updated when possible.
- That gaps in staff skills and knowledge are supported.

Curriculum Development & Organisation
Once a term every class, from Reception to Year 6, will aim to complete two units of work based on the 'Knowsley City Learning Centres' Computing Scheme of Work and Planning' in conjunction with the 2014 Curriculum guidelines. Each unit of work will last for half a term (see Curriculum Map on www.mosscroftprimary.co.uk).

'Knowsley City Learning Centres' Computing Scheme of Work and Planning' (CLC planning) and 'Rising Stars Switched on Computing Scheme' are used to form the basis of our medium term planning. This scheme is integrated to ensure that delivery of Computing is cross curricular and should be inherent to all subjects. Learning objectives, activities, vocabulary and assessment are outlined in these plans. Teacher annotations and adaptations are made, to ensure the plans are progressive in developing pupil capability.

Each class, from Year 1 to Year 6, is allocated a timetabled slot in the Computing suite. Classes are equipped with desk top computers and IWB's. I-Pads and other technological resources are available for use throughout the school (e.g. cameras, Bee-Bots etc). Desktop computers and I-Pads are allocated to the EYFS setting.

Teaching & Learning
Teachers' planning is differentiated to meet the range of needs in any class including those children who may need extra support, those who are in line with average expectations and those working above average expectations for children of their age.

A wide range of styles are employed to ensure all children are sufficiently challenged. These include:

- Groupings: children may be required to work individually, in pairs or in small groups according to the nature or activity of the task.
- Different paces of work.
- Different groupings of children - groupings may be based on ability either same ability or mixed ability.
- Different levels of input and support.
- A variety of expected outcomes.

The SMT will review teachers' plans across the curriculum, to ensure a range of teaching styles and computing opportunities are employed to cater for all needs and promote development in this subject.

Equal Opportunities

Mosscroft Primary School embraces a culture of equal opportunities to ensure every member of the school community is regarded as being of equal worth and importance, irrespective of culture, race, gender, learning abilities, sensory or physical impairment, social class or lifestyle.

The school achieves this through a system of recognising differences, meeting individual needs and taking positive action, so that everyone has equal access to the educational opportunities offered by the school.

Furthermore, the school regularly monitors progress and achievement (see assessment section). We understand that a child's self-perception can be influenced by his or her environment, and so we aim to enhance our children's self-esteem and self-confidence by positively working to reduce any form of bias or discrimination and by promoting equality of opportunity. Strategies are employed to ensure that the cross-curricular dimension of equal opportunities permeates all of the life and work of the school.

The school recognises that direct and indirect discrimination may occur and therefore understands the need for a positive and effective Equal Opportunities Policy.

It is our policy to ensure this by:
- Ensuring all children follow a differentiated adaptation of the CLC Scheme of Work.
- Evidencing children's Computing work.
- To provide equal access and fairness of distribution of Computing opportunities, including: I-Pads use and Computer Clubs (after school and during lunch times).
- Providing curriculum materials and software which are in no way class, gender or racially prejudice or biased.
- Monitoring the level of access to computers in the home environment to ensure no pupils are unduly disadvantaged.

We are currently investigating ways in which parents can be supported in developing their knowledge of curriculum requirements for Computing and how they can support their children.

E-Safety

Mosscroft Primary School adopts the definition of safeguarding used in the Children Act 2004 and in the department for education and skills guidance document *Working together to safeguard children,* which focuses on safeguarding and promoting children's welfare. These can be summarised as:

- Protecting children from maltreatment.
- Preventing impairment of children's health or development.
- Ensuring that children are growing up in circumstances consistent with the provision of safe and effective care.
- Undertaking that role so as to enable those children to have optimum life chances and to enter adulthood successfully.

Our procedures, systems, and ethos lead to outcomes whereby pupils feel safe. Staff and others who work intensively with pupils in the school, know how to recognise signs of abuse, and what steps to take if they have concerns that a child has suffered or is at risk of suffering significant harm. We take timely and appropriate action in incidences where a child has suffered or is at risk of suffering significant harm. We assess risks and take sensible, well thought through steps to mitigate them.

We consider types, rates and patterns of bullying and take steps to prevent and tackle all forms of bullying and harassment (this includes: cyberbullying, prejudice based bullying related to SEN, sexual orientation, sex, race, religions and beliefs, gender reassignment or disability).

Pupils are developing an awareness of different forms of bullying including cyberbullying and prejudice based bullying, and actively try to prevent it from occurring. Procedures and training will be put in place to develop the pupil's understanding of how to keep themselves and others safe in different situations, including in relation to e-safety.

At Mosscroft Primary School, e-safety is categorised as the ability to protect and educate pupils and staff in their use of technology and to have appropriate mechanisms to intervene and support any incident where appropriate. E-safety can be categorised into three areas of risk (Ofsted 'Inspecting e-safety in schools'). Our procedures in these areas are outlined below:

Content: (Being exposed to illegal, inappropriate or harmful material)
Staff rigorously plan, test and assess the appropriateness of activities including web-based work. Safeguarding procedures are put in place to reduce risk of exposure. Children are reminded at appropriate intervals of safe internet procedures and responsible behaviour if exposure to inappropriate material should occur. SMT and the Learning Mentor are informed of any incidents.

Contact (being subject to harmful online interaction with other users)
Within the program of study (see CLC planning) children are trained in responsible online interaction. Units using Edmodo, secure email, Skype and other mediums prepare pupils for appropriate use of social networking, warning the potentially harmful elements of these programs. We plan to provide training in e-safety for staff and pupils in the coming year.

Conduct: (Personal online behaviour)

With close links to work on 'Contact' (see above), children and staff will be trained in the appropriate use of online media. Sanctions, guidelines and procedures will be followed by the SMT in areas where misconduct occurs.

Reporting routines are clearly understood by all staff. All concerns are to be reported by staff to SMT or Safeguarding Officers (currently Penny France, Elaine Whitby). The school has discussed the introduction of report abuse buttons for example CEOP. Once in place, its use will be clearly sign posted and children and staff will be trained in its effective use.

A group of Computing champions have been chosen to work in this subject due to their expertise. These champions will have clearly defined responsibilities (see below).

As part of the school's reward systems a select group of children who have demonstrated awareness of responsible computing and the issues of e-safety will be rewarded by being asked to become 'Mosscroft Digital Leaders' (See SMT and Computing Champions for further information).

Internet access is planned to enrich and extend learning activities. The school has acknowledged the need to ensure that all pupils are responsible and safe users of the Internet and other communication technologies. Although the school offers a safe online environment through filtered internet access we recognise the importance of teaching our children about online safety and their responsibilities when using communication technology.

Management Information Systems (MIS)

ICT enables efficient and effective access to and storage of data for the school's management team, teachers and administrative staff.
The school complies with LEA requirements for the management of information in schools.

Only teaching staff have access to 'Teachers' section of the server which is accessed using a password . Only trained & designated members of staff have authority and access rights to input or alter the data.
Teacher laptops are encrypted as are Teacher's memory sticks for specific sensitive data.

I-Pads, laptops and other computers are code protected. The school has defined roles & responsibilities to ensure data is well maintained, secure and that appropriate access is properly managed with appropriate training provided. B and M computing services service and maintain all school digital equipment and ensure safety procedures are met. Knowsley CLC provide additional training in e-safety which the school attend. The CLC also control websense and site block regulation for the school.

Assessment (See school Assessment Policy)

Computing is assessed both formatively and summatively using the BDM systems.
Formative assessment occurs on a lesson by lesson basis based on the lesson objectives and outcomes in the CLC scheme of work. These are conducted informally by the class teacher and are used to inform future planning.

Further Assessment is currently being created by Knowsley CLC. D. Rogers will be involved in this process. Self-assessment is available for KS 1 and 2 pupils this can also be used as a class assessment which is then used to check on coverage and passed onto the next class teacher to help with progression and expectations of ability. This assessment tool will be introduced in future years.

School liason, transfer and transition
The school is connected to the 'CLEAR Account' intranet which enables the transfer of information electronically. CLEAR Email accounts are now used to liase with the LEA, governing body, other schools etc. Training has been provided for this.

Inclusion
We recognise Computing offers particular opportunities for pupils with special educational needs and gifted and/or talented children and /or children with English as an additional language for example.
Computing can cater for the variety of learning styles which a class of children may possess.

Using Computing can:
- increase access to the curriculum
- raise levels of motivation and self esteem
- improve the accuracy and presentation of work
- address individual needs

We aim to maximise the use and benefits of Computing as one of many resources to enable all pupils to achieve their full potential. If the situation arises, the school will endeavour to provide appropriate resources to suit the specific needs of individual or groups of children.

Roles & responsibilities

Senior Management:
The overall responsibility for the use of Computing rests with the senior management of a school. The Head, in consultation with staff:
- determines the ways Computing should support, enrich and extend the curriculum;
- decides the provision and allocation of resources ;
- decides ways in which developments can be assessed, and records maintained ;
- ensures that Computing is used in a way to achieve the aims and objectives of the school;
- ensures that there is a Computing policy, and identifies Computing Champions.

Computing Champions:
There are a designated group of Computing Champions who oversee the planning and delivery of the Computing Curriculum within the school.
The Computing Champions will be responsible for:
- Raising standards in Computing as a national curriculum subject.
- Facilitating the use of Computing across the curriculum in collaboration with all subject Champions.
- Providing or organising training to keep staff skills and knowledge up to date.

- Advising colleagues about effective teaching strategies, managing equipment and purchasing resources (in conjunction with B and M).
- Monitoring the delivery of the Computing curriculum and reporting to the headteacher on the current status of the subject.

The Classroom Teacher:
Even though whole school co-ordination and support is essential to the development of Computing capability, it remains the responsibility of each teacher to plan and teach appropriate Computing activities and assist the champion in the monitoring and recording of pupil progress in Computer Science.

Monitoring
Monitoring Computer Science will enable the Computing Champions to gain an overview of Computing teaching and learning throughout the school. This will assist the school in the self evaluation process identifying areas of strength as well as those for development.

In monitoring of the quality of Computing teaching and learning, the Computing champions will:
- Observe Computing teaching and learning in the classroom
- Hold discussions with teachers
- Analyse assessment data with SMT.

Health & Safety
We will operate technological equipment in compliance with Health & Safety requirements. Children will also be made aware of the correct way to sit when using the computer and the need to take regular breaks if they are to spend any length of time on computers. Computer Room Rules are also on display within the Computing room for reference.

Home school links
We are currently researching ways in which children can access digital homework out of school. Teachers are sensitive to the fact that children may not have access to computers or may not wish to use it to complete tasks out of school. Any work brought into school must be scanned for viruses.
A school email address has been given to parents and is listed on the weekly newsletter. More parents are now using this to contact staff, arrange meetings etc.

We have a school website which promotes the school's achievements as well as providing information and communication between the school, parents and the local community.
Texts are sent by the SMT to parents to inform them of current events and to remind them of deadlines and requests. The school is currently in the process of setting up its own Twitter account to provide further communication for parents.

Appropriate legislation, including copyright and data protection
B and M are responsible for all software loaded on school computer systems. The downloading of material can only be carried out by a representative of B and M under administrator codes. Access to administrator accounts is held solely by B and M computer services.

All our software is used in strict accordance with the licence agreement. We don't allow personal software to be loaded onto school computers.

Effective and efficient deployment of ICT resources
Computing resources are deployed throughout the school to maximise access, to enhance teaching & learning and to raise attainment.
To enable regular and whole class teaching of Computing, the school has a computer suite which all classes in key stages 1 & 2 uses for approximately 35 minutes per week to develop their computing skills.

A consistent interface is provided on all machines to enable familiarity and continuity with generic 'toolkit' software licensed and available on all curriculum computers in school. Subject specific titles and any specialist equipment e.g. sensors, are kept in the Computing stock cupboard and can be borrowed when needed.

A curriculum 'peer to peer' network enables internet access on all machines as well as storage and access to shared files. We aim extend the availability of Computing equipment and interactive digital resources.

Mosscroft Primary School

Internet Policy 2014

Mosscroft Primary School Internet Policy was developed and agreed by the whole staff and has the full agreement of the Governing body. The policy was developed from government guidance. The policy was approved at a meeting of the Governing body.

Purpose

The purpose of Internet use in school is to raise educational standards, to promote pupil achievement, to support the professional work of staff and to enhance the school's management information and business administration systems. Internet use is a part of the statutory curriculum and a necessary tool for staff and pupils. Internet access is an entitlement for students who show a responsible and mature attitude.

Benefits

- Enhancement of all curriculum subjects (including topics referred to in the 2014 Computing Curriculum).
- Access to world-wide educational resources.
- Educational and cultural exchanges between pupils (including E-twinning).

Internet Content

The school Internet access will be designed expressly for pupil use and will include filtering provided by the Education Authority or a third party and be appropriate to the age of pupils. The school will work in partnership with parents, the LA, B and M computer services and the Internet Service Provider to ensure systems to protect pupils are reviewed and improved. Pupils will be taught what is acceptable and what is not acceptable and given clear objectives regarding Internet use. Staff should guide pupils in on-line activities that will support the learning outcomes planned for the pupils' age and maturity. Pupils will be educated in the effective use of the Internet in research, including the skills of knowledge location and retrieval.

The school will, where possible, ensure that the use of Internet derived materials by staff and by pupils complies with copyright law. Pupils should be taught to be critically aware of the materials they read and shown how to validate information before accepting its accuracy.

Safeguards

If staff or pupils discover unsuitable sites the URL (address) and content must be reported to Knowsley CLC via Computing Champions.

E-mail

KS1 pupils use www.maily.com and www.tocomail.com, while KS2 pupils use www.edmodo.com and live email accounts to access emails. These must be created and monitored by the class teacher, with appropriate privacy settings in place. Pupils must immediately tell a teacher if they receive offensive e-mails. Pupils must not reveal personal details of themselves or others, such as address or telephone number, or arrange to meet anyone in e-mail communication.

School Web Site
The point of contact on the Web site should be the school address, school e-mail and telephone number. Staff or pupils' home information will not be published. Web site photographs that include pupils will be selected carefully and with the express written permission of parents and carers. The school will keep a record of all pupils who do not have consent for use of their work or photographs on the school website.

Emerging Internet uses
Emerging technologies will be examined for educational benefit and a discussion with SMT will be carried out before use in school is allowed. Pupils will not be allowed mobile phones during school time. Any mobile phones brought inadvertently into school should be kept in the school office during the school day. The sending of abusive or inappropriate text messages is forbidden.

Inappropriate Material
In common with other media such as magazines, books and video, some material available via the Internet is unsuitable for pupils. The school will take all reasonable precautions to ensure that users access only appropriate material. However, due to the international scale and linked nature of Internet content, it is not possible to guarantee that unsuitable material will never appear on a school computer. Neither the school nor Knowsley Council can accept liability for the material accessed, or any consequences of Internet access. The use of computer systems without permission or for inappropriate purposes could constitute a criminal offence under the Computer Misuse Act 1990. Methods to identify, assess and minimise risks will be reviewed regularly.

Introduction of the policy to pupils
From Reception to Year 6, a lesson on responsible Internet use will be taught for both school and home use. This will introduce and/or re-emphasise the school Internet policies. Rules for Internet access will be posted near all computer systems. Pupils will be informed that Internet use will be monitored. Instruction in responsible and safe use should precede any Internet access.

Staff
All staff must accept the terms of the 'Responsible Internet Use' statement before using any Internet resource in school. All staff including teachers, supply staff, teaching assistants, support staff and administrative staff will have access to the School Internet Policy, and its importance explained. Staff should be aware that Internet traffic can be monitored and traced to the individual user. Discretion and professional conduct is essential.

ICT system security
The school ICT systems will be reviewed regularly with regard to security and any LA guidance will be adopted. Personal CD's and USB sticks may not be used without an up to date virus check. Only B and computer technicians will be able to introduce and install new programs onto the network.

Complaints
Responsibility for handling incidents will be delegated to a senior member of staff. Any complaint about staff misuse must be referred to the Headteacher. Parents will be informed should a pupil misuse the Internet.

Parents

Parents' attention will be drawn to the School Internet Policy available via the school website. Internet issues will be handled sensitively to inform parents without undue alarm. Further Information and support for parents can be found at http://www.parentscentre.gov.uk/

Review

This policy will be reviewed annually in the Summer term.

Mosscroft Primary School

Responsible Internet Use 2014

We use the school computers and Internet connection for learning. These rules will help us to be fair to others and keep everyone safe.

- I will ask permission before entering any Web site, unless my teacher has already approved that site.

- I will only sign in using my own username.

- I will not look at or delete other people's files.

- I will only e-mail people I know, or those my teacher has approved.

- Any messages I send will be polite and sensible.

- When sending e-mail, I will not give my home address or phone number, nor will I arrange to meet someone.

- I will ask for permission before opening an e-mail or an e-mail attachment sent by someone I do not know.

- If I see anything I am unhappy with or I receive messages I do not like, I will tell a teacher immediately.

- I know that the school may check my computer files and may monitor the Internet sites that I visit.

- I understand that if I deliberately break these rules, I could be stopped from using the Internet or computers.

The school may exercise its right by electronic means to monitor the use of the school's computer systems, including the monitoring of web-sites, the interception of E-mail and the deletion of inappropriate materials in circumstances where it believes unauthorised use of the school's computer system is or may be taking place, or the system is or may be being used for criminal purposes or for storing text or imagery which is unauthorised or unlawful.