Policy on Computing & IT

MUGGINTON CofE PRIMARY SCHOOL

Reviewed	23rd January 2017
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CoG	
Future Review	Spring 2019

Mugginton CofE Primary School
Computing and Information Technology Policy

This policy has been written in accordance with the Christian ethos of our school, our recognition of British values, an awareness of our position in the Global community and taking account of all current Safeguarding and Child Protection guidance. and the new national curriculum September 2014.

The skills of computational thinking and creativity are essential for a digital world. Our aim is to equip children with the confidence to use those skills by using information technology as a tool to enhance learning through a relevant, challenging and enjoyable curriculum. A progressive approach to the learning of skills enables children to use it effectively alongside an understanding of how to use technology safely, respectfully and responsibly.

1. Computing

1.1. Aims and Objectives

- To reflect the overall curricular and pastoral aims of the school
- To meet the requirements of computing and IT in the National Curriculum 2014
- To respond to new developments in technology
- To enhance learning and motivation in other areas of the curriculum using IT and computing.
- To ensure that through careful differentiation and management of classroom activities that all pupils are able to make progress and meet with appropriate challenge.

1.2. Teaching & Learning

We aim 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

1.3. Computing & IT Curriculum Planning

Early Years

In foundation stage children use IT in a range of contexts through a broad play-based experience:

- Using electronic toys in play situations e.g. remote controlled cars.
- Playing back sounds recorded on a computer or sound player.
- Interacting and exploring their outdoor environment using multimedia equipment, including digital cameras, video cameras and microscopes to capture still and moving images.
- Using ipads to play games or to create a story.
- Using programmes on the netbooks and interactive whiteboard.

We relate this to the objectives set out in the Early Learning Goals (ELGs), which underpin the curriculum planning for children aged three to five.

KS1

By the end of key stage 1 pupils should be taught to:

- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions;
- create and debug simple programs;
- use logical reasoning to predict the behaviour of simple programs;
- use technology purposefully to create, organise, store, manipulate and retrieve digital content;
- recognise common uses of information technology beyond school;
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

KS2

By the end of key stage 2 pupils should be taught to:

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts;
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output;
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs;
- understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration;
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content;
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information;
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

1.4. Examples of the contribution of IT to the teaching of other curriculum areas

English

IT and computing provide opportunities to write programs that accomplish specific goals. Through video links children develop their speaking & listening skills. Internet research enhances reading skills and stimulates ideas for writing in a range of genres. Children learn the presentation of their work.

Mathematics

Any IT activities build upon the mathematical skills of the children. Children use IT in mathematics to collect data, make predictions, analyse results, and present information graphically. They use programmable robots to investigate shapes and position and direction. Mathematical models can be explored and interactive games develop number skills.

Science

Digital microscopes, cameras and dataloggers are used to explore and record the environment. Children improve their scientific knowledge through interactive games and internet research and multimedia programs are used to present information.

Art & Design

Computing offers children the freedom to express their own ideas creatively and to experience the designs of others. Children will have the opportunity to develop their creativity through the range of networked software and digital technology.

PSHE and Citizenship

Computing makes a contribution to the teaching of PSHE and citizenship as children learn to work together in a collaborative manner. They develop a sense of global citizenship by using the Internet. Through the discussion of moral issues related to electronic communication, children develop a view about the use and misuse of computing

Spiritual, moral, social and cultural development and global education

Understanding how computer networks and the world-wide web can offer opportunities for communication and collaboration. Internet research is used to develop growing knowledge and positive attitudes towards other cultures and societies. They also gain a knowledge and understanding of the interdependence of people around the world.

Teaching computing & IT to children with special needs

All teaching and non-teaching staff are responsible for ensuring that all pupils irrespective of gender, ability, ethnicity and social circumstances have access to the whole curriculum. All pupils are set appropriate work according to their ability, not age. Special needs pupils may be supported in a variety of different ways – see SEND policy.

1.5. Assessment and recording

See policy on assessment, reporting and recording.

1.6. Resources

Interactive whiteboards are installed in both classrooms. A bank of netbooks and i-pads are available for use. These are connected to the network and are stored in a locked trolley.

Other computing resources include;

- A programmable robot,
- Eggboxes for control technology
- Dataloggers
- Digital microscopes,
- Tuff cams,
- Sound recorders.
- Remote controlled cars

1.7. Monitoring & Review

The computing coordinator monitors the work of pupils throughout the school and the Headteacher reviews the planning for each key stage termly. It is the responsibility of all staff to monitor and evaluate the curriculum provision for music within the school in order that pupils make the greatest progress. Evaluation may take place by means of a number of methods of including:

- Assessment of pupils' work and their achievements.
- Analysis of teacher's planning as seen in the long and short term plans.
- Discussion between staff.
- Classroom observation.
- External inspection and advice.

- Pupil interviews.

At the end of the topic teachers review their work and annotate plans for future reference.

1.8. Health & Safety

Mugginton CofE Primary School is committed to developing the use of computing throughout the school organisation and to developing the skills and knowledge of staff, students and the wider community. In order to do this safely children and staff are regularly alerted to the dangers of the internet and taught how to deal with problems. The strict rules and regulations are displayed clearly in each classroom and these are taught as part of our curriculum, including the annual Safer Internet Day.

Computing is used by students to assist their work and learning, by staff as a support to their teaching and administrative work and by administration staff to provide effective and efficient support for School systems and procedures.

2. INFORMATION TECHNOLOGY

2.1. ADMINISTRATION

IT will be used wherever possible to assist staff in their roles and responsibilities, to provide data as appropriate and to assist in the management of School systems, e.g. finance, attendance, performance monitoring.

The Bursar, in conjunction with the Headteacher and the IT Co-ordinator will be responsible for all aspects of IT administration.

2.2. CURRICULUM

IT will be used wherever possible to assist staff and students in their teaching and learning and the IT Co-ordinator in conjunction with other key staff will be responsible for all the co-ordination of all aspects of IT in the curriculum in their teaching. There are a number of IT facilities located around the School and as the provision of equipment develops there will be increased access to IT resources.

- A 3 year programme for teaching IT skills is in place to ensure the full coverage of the curriculum.
- Teachers assess the achievements of pupils' skill levels and plan to develop these throughout the curriculum.
- The School operates an open use policy so that students who identify a need, which requires the use of IT in the solution of a task, are able to use any available IT resources.
- All staff should be aware that the resource is also available at all times for their own use.
- Technician support is available through our IT coordinator and the IT team at Summerside Computers.
- Problems with machines do occur and can be minimised if staff and pupils take care of the resource, use careful time management and planning.
- Those problems requiring more specialised intervention need to be identified immediately to the Headteacher or the IT Co-ordinator in order that help can be given and the operation of the resource can be managed effectively.

2.3. SOFTWARE AND LICENSING

- Software used on School IT resources must solely be that which has been purchased with an accompanying individual or site licence. This means that the software is licensed for use (either unlimited or limited to a number of machines at any one time) on the School site only.
- Additional licences may be purchased by the School where colleagues are required to undertake work at home on specific software. The Headteacher will monitor and authorise all requests for such software.

- Any software purchases should firstly be discussed with the IT Co-ordinator and when the software arrives in School it is registered centrally with the School Bursar/ IT Technician for secure storage.
- Software audits will be carried out on a regular basis to:
    - ensure no unlicensed software is being used in school
    - prevent programmes from being downloaded from the Internet
    - audit all software on network machines connected via the server
- However a rolling programme of audits will continue on standalone machines and all other equipment.
- Curriculum Co-ordinators who are concerned that unlicensed software might be being used in their area should discuss the matter with the Headteacher.
- Under no circumstances must copies of any software be transferred to or from any off site system unless the appropriate licence has been purchased and software cannot be hired or sold on to another user.
- Installation of software is the sole responsibility of the IT Co-ordinator and person(s) designated by him/her to carry out that task – i.e. the IT coordinator.
- Software is continually being updated and a catalogue of available software is being developed and is available upon request from the IT coordinator.
- CD's etc. of purchased software must be given to the School Bursar on receipt and original copies of licences etc. will also be kept by the School Bursar.
- The IT coordinator will maintain an inventory of software installed and will advise the Headteacher if additional licences need to be purchased.

2.4. SECURITY AND INVENTORIES

- All computers and associated items will be security marked by the bursar wherever possible. An additional identification mark will also be added to the computers to facilitate the monitoring of individual machines.
- Items should be entered on the Whole School IT inventory maintained by the IT coordinator. Where possible serial numbers should be recorded for all items.
- The Whole School IT inventory will provide an overview of all resources within the School and provide a profile of each machine.

2.5. INSURANCE

- The School has insurance to cover the theft of hardware and software from the premises only.
- All staff and students are encouraged to adopt practices which will encourage good security of rooms and equipment.
- Staff wishing to continue curriculum development or professional development by making use of School owned systems outside School hours and off the premises should first discuss the matter with the Headteacher and complete the personal off site use form available from the School bursar.
- Colleagues are advised to check car and home insurance policies to ensure they are adequately covered for any loss or damage prior to using personal items at home.

2.6. DAMAGE, REPAIRS AND VIRUS PROTECTION

- Any staff member detecting any damage or malfunction should report it directly to either the IT Co-ordinator or the Headteacher as soon as it has been detected.

- Memory Sticks or CD ROMS brought into the School must be checked for viruses on designated machines before being used on School systems.
- Every IT user, member of staff and student has a responsibility to the whole IT user community.
- Appropriate virus checking software will be installed on a nominated machine in each area and all students and staff should ensure disks etc. are virus checked before using them on any School computer.

2.7. AUTHORISATION AND ACCESS

- Levels of access will be established for different users on the various networks and systems operating in School.
- Responsibility for maintaining and monitoring access and authorisation will be as follows:
    - School Network — Headteacher.
    - Broadband connections — As above.
    - Administration Network — As above.
    - Serco facility — As above.
    - SAP system — Headteacher.
    - RM Integris — Headteacher/Bursar
- All access and authorisations will be limited to nominated personnel and details of passwords and other secure information will be kept by the Bursar as appropriate.
- All staff will follow established IT guidelines on using passwords effectively and where LA guidelines exist, users will follow those guidelines, e.g. SAP system.
- Access to the server is limited to nominated personnel who will be advised on security arrangements for the server rooms.

2.8. USE OF THE INTERNET

- Internet access will be available to staff and students via all workstations connected to the School and administration network where considered appropriate.
- All members of the School community and visitors to the School are expected to use the Internet in an appropriate manner at all times and 'Internet Use Guidelines' will be displayed in all areas with access to the Internet.
- All use of the Internet by students, staff and other users will be monitored and users will be made aware of the monitoring procedure.
- If students or staff discover unsuitable material the URL and the nature of the content should be reported immediately to the Headteacher.
- Any unsuitable URL or site with inappropriate links will be reported to the Internet Service Provider as soon as possible.
- Where staff may be required to check a site which might contain unsuitable material or links this should be done with 2 staff present, on a designated machine, and logged in the 'Site Check' record which is kept in the office in the computer access book in the computer file.
- Students are not allowed to access chat lines although access is permitted to monitored user groups where staff are involved in a specific project, e.g. Gifted and Talented summer School E-Circles, robot challenge. Staff will discuss the issues relating to the use of chat lines to highlight potential dangers as part of the core IT programme of study (Online Safety). Social networking sites are filtered out by Capita.

- The School e-mail programme is also monitored for inappropriate content and the IT coordinator will run regular checks on content.
- The School e-mail is checked on a daily basis by a nominated member of staff who ensures the e-mails reach their required destination. All e-mails not clearly identified to specific staff will be referred to the Headteacher or School bursar.

  Nominated staff will also be able to access their professional e-mails (@mugginton.derbyshire.sch.uk) directly through the Derbyshire Portal.

  The School curriculum network and the School administration network are not directly connected to prevent access to data and there are currently no plans to connect the two systems.
- Any member of the School community or other School user who, in the opinion of the Headteacher or the IT Co-ordinator, uses the Internet inappropriately will have their Internet access rights removed.

2.9. BACKING UP AND DISASTER RECOVERY PROCEDURES

2.9.1. Backing up

Administration System

The School bursar will ensure that regular and systematic back up of data is completed on a regular basis so that recovery of essential data can be managed in the event of loss of data files or system failure.

Backup copies will be securely stored against theft, corruption or physical damage and copies of the backup files are kept in a locked filing cabinet and off site so that in the event of a major incident a backup copy is available.

Two sets of back up discs, used in rotation, will be used and a record of all backups will ensure the most up to date information is retrieved.

Curriculum System

The Co-ordinator of IT will ensure that regular and systematic back up of data is completed on a regular basis so that recovery of students' work can be managed in the event of loss of data files or system failure.

It is essential that hard copies are kept of all work which is for examination purposes, including IT subject assignments.

2.9.2. Disaster Recovery Procedures

The School will ensure procedures are in place to recover all data and return IT systems to full use in the event of a critical incident or local problem. A backup server ensures data is not lost in the event of main server failure and some software is available to recover data from individual machines.

The IT Co-ordinator will maintain:

- an up to date list of contact names who will be available to assist in the recovery process, e.g. network management consultants, key staff, suppliers;
- a list of procedures and action required by key individuals in the event of a critical incident.

A copy of these lists should be kept off site by the Headteacher and the School Administration Manager.