Information and Communication Technology and Computing Policy

CONTENTS

This policy should be read in conjunction with the *E-Safety Handbook (including E-Safety Policy and Acceptable Use Policy)*, the Quality of Education Policy and the following:

Able Pupils Policy
Assessment Policy
Equality and Community Cohesion Policy
EYFS Policy
Health and Safety Policy
Home Learning Policy
Inclusion Policy
Safeguarding and Child Protection Policy

Other documents that support the teaching and learning of ICT:

National Curriculum for Computing
Development Matters (for the Early Years Foundation Stage)
Documentation to support curriculum planning e.g. Hamilton Trust, QCA materials

Throughout this policy 'parents' denotes those with parental responsibility.

Within this Policy, Information and Communication Technology is abbreviated to ICT.

1. Mission Statement

Through teaching ICT and Computing, Belmont Primary School equips children to participate in a rapidly changing world where work and leisure activities are increasingly transformed by technology. ICT is an effective teaching and learning tool to ensure high standards of pupil attainment across the curriculum, and provides children with lifelong learning skills. Children are taught how to use the Internet and email safely, both in school and outside the school environment. In addition, the School is committed to the use of ICT to promote efficient working practices and management of data. At Belmont, we enable children to find, explore, analyse, challenge, exchange and present information. Children will also use computer science to analyse and solve problems in computational terms.

1.1 Aims and Objectives

It is our intention for children to:

-For Computing to be embedded across our wider curriculum.
-To be taught the National Curriculum content through high quality teaching.
-To be equipped to participate in a rapidly changing world with lifelong learning skills enabling them to be confident and creative users of technology
-To be taught how to use the Internet and email safely and responsibly, both in school and outside the school environment.
-To find, explore, analyse, challenge, exchange and present information using a range of media.
-To analyse and solve problems in computational terms by writing algorithms and programs.

2. Approaches to Teaching and Learning

ICT and computing skills are taught both within dedicated ICT lessons once a week and within other curriculum subjects; using the ICT suite or other resources (see below). Teachers ensure meaningful contexts for the teaching of skills and, where relevant, these link to the cross-curricular topic being studied.

We have introduced the use G Suite for Education for children to access remote learning, complete some in school assignments and for the setting of home learning tasks.

3. Resources

The School has a fully equipped and networked ICT suite with 30 computers, 62 Chromebooks (located on the top and middle floors) and 30 Ipads. Each classroom has at least one computer so children and staff are also able to log on to the network from these as well as being equipped with interactive whiteboards and interactive screens. We also have a bank of 21 laptops which are able to be loaned out to pupils. Internet use is a part of the statutory curriculum and a necessary tool for staff and pupils. There is access to the Internet within the classroom and the ICT Suite. Wireless is available throughout all school buildings.

All year groups will have subject specific ICT resources for teaching and learning. The School subscribes to Espresso, Education City, My Maths, Sumdog, Timestables Rockstars, Numbots and Purple Mash and these are used frequently within lessons. Other software and hardware is chosen to support age-appropriate development of skills including portable resources, such as cameras and voice recorders. The school has also invested in several robots, including two Edbots, 10 Dash and Dot robots and 4 Kubos. Each type of robot has been purchased according to the different abilities and needs of the Key stage in which they will be used.

The School liaises with parents via ParentMail. This is an email system that is used by office staff to communicate with parents. SMS can also be used for emergency or urgent messaging. ParentPay is

used for online payments by parents. Almost all payments are put through this system, enabling the school to be cashless. Parents can use the Parent Lite app, which allows them to update their child's details online. Technical assistance is given to parents who require it.
The School has a public website and app supported by GreenSchoolsOnline, which is available to the wider community to access information about the School. Pupils and parents can access their child's year group notice board to locate information such as home learning tasks that have been set, trip information and current/ future learning for the week. The information is comprehensive, taking the place of a prospectus and providing regular news updates.

All computers are networked to the School photocopiers. Access to the network server is via a password. (For details of Password Protocol see E-Safety Handbook). Access to the server is limited to the ICT Leaders, Network Managers and Technicians. Any problems with hardware and software in school are logged by the member of staff using the help desk software which is installed on each classroom computer. The IT Technician will then address these issues on his/her next visit.

Computers for staff support preparation, planning and administration, including both laptops and machines in offices and staffroom. Teaching staff can access the school network off-site via remote access, which enables them to carry out work at home if they wish.

4. Learning Environment

The School's ICT suite enables whole classes to work together (in pairs or individually). There is also an IT Hub, where children can use and explore technology. As a teaching and learning tool, ICT is used across all areas of the School's indoor and outdoor learning environment. Teachers are asked to monitor to ensure equal access to individuals.

5. Planning

The school has implemented the NCCE (National Centre for Computing Education) Teach Computing Scheme of work form Years 1-6. This is a spiral based curriculum, in which children revisit concepts regularly. This style of curriculum design reduces the amount of knowledge lost through forgetting, as topics are revisited yearly. As ICT is taught across the Curriculum, ICT is also integrated into planning for core and foundation subjects (see section 7 below). E-Safety is also planned for within the Curriculum (see E-Safety Policy).

6. Assessment

There are many opportunities within ICT and computing for children's on-going self-assessment as they seek solutions to problems, edit and self-correct their work. Children are assessed at the end of each unit of work by teachers using assessment grids. Some units of work have summative assessments, which can be used to inform teacher judgements. See Assessment Policy for further details.

7. Cross Curricular Opportunities

7.1 Reading, writing, communication and maths

Communication skills are a key part of the ICT and can be applied across the curriculum as well as outside school. Access to ICT across the curriculum is always in conjunction with the School's E-Safety Policy.

The use of ICT is fully integrated into planning for English and Maths. Each class has an interactive whiteboard/screen and most lessons across the curriculum are built around flipcharts, websites and interactive activities that are shown on them.

In English, children learn how to edit and revise text. They have the opportunity to develop their writing skills by communicating with people over the Internet using their safe personal email and they

are able to join in discussions with other children throughout the world. They learn how to improve the presentation of their work by using desk-top and online publishing software. Film clips are used to stimulate writing across the year groups using the interactive screens in each classroom.

In Maths, many ICT activities build upon the mathematical skills of the children. Children use ICT to collect data, make predictions, analyse results, and present information graphically. There are also activities that enable children to acquire and practice measuring techniques involving positive and negative numbers and decimal places. In Reception to Year 2 children use Numbots to practise their number bonds. In Years 3-6 children use Sumdog and Times Table Rockstars maths software to play educational maths games, which can be accessed both at school and at home. KS1 and KS2 Classes are set online homework through My Maths and Sumdog. Children also use ICT to practise their computational skills and as an assessment tool.

7.2 Foundation subjects

As part of the topic based curriculum, children use ICT to research new topics, carry out interactive experiments, work through simulations, watch videos and film clips, and record audio and visual presentations. Topics are also used as a context for the development of skills in dedicated ICT and computing sessions.

Pupils develop research skills, safe use of search engines and become more discerning regarding the information they encounter. They are taught to decide what information is appropriate for their work. The children begin to investigate the quality and plausibility of the information they gather as well as learning to amend, edit and present work in a variety of ways depending on the purpose of the task and the audience.

7.3 Spiritual, Moral, Social and Cultural

Through the discussion of moral issues related to electronic communication, children develop a view about the use and misuse of ICT, and they also gain a knowledge and understanding of the interdependence of people around the world.

8. Enhancing the curriculum

Many children have access to ICT equipment at home, while others do not. The number of children who do not have access to ICT at home is monitored and after school access is provided e.g. Homework clubs for Upper Key Stage 2.

9. Inclusion

Classes at Belmont have children with widely differing ICT abilities and experience. ICT hardware and software also provide useful tools both to help overcome barriers and improve access for children with SEND or EAL and to enable more able, Able Pupils to be challenged further. The introduction of Digital Leaders into KS2 has been designed to support others and encourage the development of technology in school.

9.1 Special Educational Needs and Disability and English as an Additional Language

In planning lessons, teachers identify the learning goals for the majority of children and consideration is given to modifying the task, or providing peer or adult support, for children with language or learning needs.

Teachers will liaise with the Inclusion Leader and EAL support teacher on the use of ICT to improve such children's access to the curriculum. Certain pupils with physical or communication difficulties have their own equipment for use across the curriculum, which may be specially adapted.

9.2 Able Pupils

Some children exhibit particular talents in ICT and often need to be challenged through extension and enrichment activities. Able children benefit from the use of software that offers opportunities to ask questions, solve problems and investigate ideas further.

10. Health and Safety and Safeguarding

Safeguarding children is of the highest priority and this includes safe use of the Internet and other technologies. **This section should be read in conjunction with the School's E-Safety Policy.**

At Belmont, all ICT equipment along with other electrical items is regularly checked under Portable Appliance Testing (PAT) guidelines.

All members of staff and volunteer helpers who work with children on computers are required to observe safety regulations. In particular they should ensure that

- equipment is sited on a solid surface if computer trolleys are not provided in the room;
- the siting of equipment does not interfere with free movement around the room and that there are no trailing cables;
- mains sockets are not overloaded and that extension leads, where used, are secured to the classroom wall. Extension leads must not trail across the classroom floor;
- computers are not sited near to: water supply, radiators, sand trays;
- computers are kept out of direct sunlight, as this makes the screen difficult to read and can cause overheating;
- staff are aware of the location and type of fire extinguishers;
- food and drink are kept away from ICT hardware and software;
- children are aware of the safety issues surrounding the use of electrical equipment;
- faulty or broken equipment is not used and reported to the ICT Leader;
- children who are particularly sensitive to the flicker from monitors are watched carefully. A list of children who suffer from epilepsy is circulated to all staff.
- children are supervised at all times when using a computer.
- all staff are aware of, and have read, the E-Safety Policy.
- all teachers have received training on e-safety.

10.1 Rules for Internet use

Rules for Internet use are posted in all rooms where computers are used. Pupils are informed that Internet use will be monitored. Children are taught responsible and safe use procedures with regard to Internet access.

10.2 Maintenance of ICT system security

The School ICT systems are reviewed regularly with regard to security. Virus protection is installed and updated regularly. The system is scanned every evening for potential viruses. Security strategies are discussed with the LA Network Manager, particularly where a wide area network connection is being planned.

Each child is able to access the network by using either a personal username and password or a generic class login (Early Years and KS1). The Belmont network is managed and maintained by technicians from Click On IT. LGfL safeguard the server. This system enables users to save work only in a designated area. Teachers are able to log on to the network with greater privileges that allow them to access various software and files.

11. Roles and Responsibilities

11.1 ICT Leaders

The School acknowledges that the leadership and management of ICT is a significant role. In addition to the roles and responsibilities outlined in the Teaching and Learning Policy and E-Safety Policy, ICT Leaders have responsibility to:

- plan replacement and upgrade of equipment on a rolling programme in conjunction with the School Business Manager, for agreement by the Head Teacher and governors' Resources Committee.
- ensure the effective management of the School's ICT network via the work of the Network Manager in conjunction with the Head Teacher;
- manage the work of the ICT technicians (see below);
- maintain a software library and manage the use of licences and agreements for software and online resources such as Purple Mash;
- liaise with colleagues regarding the evaluation and purchase of new hardware and software;
- organise repairs to hardware and purchase of replacements and consumables.

11.2 ICT Technician(s) and Network Manager

The ICT technician's role is defined by the agreement with Click On IT. The service provided also includes management of the network (see E-Safety Policy for e-safety responsibilities) and advice as to infrastructure and upgrades. Regular responsibilities, for which the School has twice weekly onsite visits, include:

- ensuring hardware and software is functioning efficiently and any faults are rectified, where possible;
- arranging repairs to hardware and purchase of replacements and consumables as instructed by the ICT Leader and Head Teacher;
- assisting with the set-up of new systems and hardware;
- liaising with other borough technicians and implementing borough-wide strategy for improvements to the Service;
- adding new users to the server;
- working closely with ICT Leaders and providing training and advice to them and to other staff members as appropriate;
- working through problems logged on the help desk software and giving feedback to the ICT Leaders.

12. Policy Review

This Policy will be reviewed according to the cycle agreed by the School Policies Committee for curriculum policies.