Computing Policy

Status of Policy	Date
Policy Reviewed	Summer Term 2016
Agreed by Staff	Summer Term 2016
Agreed by Governors	Summer Term 2016
Next Review	Summer Term 2018

Headteacher's Signature: Date:

Chair of Governor's Signature: Date:

East Herrington Primary Academy ICT Policy

1: Strategic Management

1.1 Introduction to the Policy

The school Computing policy is reviewed annually by the ICT co-ordinator, head teacher and SMT.

At East Herrington Primary Academy our aims are to broaden the horizons of our pupils, to help them cope with their environment, to develop their confidence and appetite for learning and to try to equip them for adult life and work in a fast changing society. Computing has a vital role to play in the achievement of these aims.

This policy will:

1. ensure that the requirements of the National curriculum are met;
2. define the place of Computing in the curriculum, supporting all other subjects whilst integrated in other subjects;
3. ensure continuity and progression in the teaching and learning of Computing skills;
4. support staff in the planning and delivery of pupils' Computing experience;
5. form a basis of information for teachers, parents and governors.

1.2 Aims of using ICT and Computing

We realise that modern technology relies heavily on the use of ICT and Computing. Children accept new technology readily and can be challenged when situations arise when they need to make decisions about whether to use technology to accomplish tasks. At East Herrington our aims are to broaden the horizons of our pupils, to help them cope with their environment, to develop their confidence and appetite for learning and to try to equip them for adult life in a fast and changing society.

We aim to ensure that:

- We will provide pupils with the experience necessary to enable them to gain confidence in dealing with the areas of Computing; appropriate to their age and ability within the Primary curriculum.
- We help pupils to develop an understanding of the strands of Computing in the National Curriculum. (Programming, Digital Literacy, Computer Science and e-safety.)
- The development of these capabilities is in conjunction with the subject attainment targets, through integration and experiences in all areas of the curriculum.
- Pupils with learning difficulties are motivated and stimulated. Basic concepts and skills can be reinforced using technology and appropriate software packages.
- Teachers and pupils use technology wherever it can add real value to the process of teaching and learning.
- Pupils and staff recognise the benefits afforded by use of the internet but are aware of the associated hazards and are equipped to deal with instances of inappropriate use by others.
- That parents and governors are given the opportunity to be informed of the benefits afforded by use of the internet and are made aware of the associated hazards.

1.3: Roles and responsibilities

The key responsibility for Computing within the school lies with the ICT co-ordinator and the Senior Leadership Team. The success of this policy depends on the participation of all staff in its development and implementation.

The roles of the ICT co-ordinator (Head teacher and SMT)

- Annual review of the schools Computing provision, the school's Computing Policy, Internet policy and Development plan. (Software and hardware audit.)
- Attending relevant Inset courses and Computing co-ordinator meetings.
- Liaisons with ICT support staff.
- Implementing the Computing curriculum in respect of structure and progression between phases and classes.
- Co-ordinating the recording of teaching and learning activities.
- Support staff in the planning of units from the Rising Stars Computing scheme.
- Arranging the provision of technical and network support.
- Disseminating Computing information throughout the school.

The role of the ICT Technician

- Support and maintain the school ICT facility.
- Provide advice and support to all staff in the everyday use of hardware and software.
- Provide on-going training.
- Liaise with Sunderland ICT services.
- Liaise with suppliers of hardware and software products.
- Advise and assist the ICT Co-ordinator in the procurement of software, hardware and infrastructure.
- Where required to support staff and children during lessons involving ICT.
- Ensuring the security and safety of equipment/security marking.

The roles and responsibilities of other staff

Classroom teachers are to ensure that there is a spread of accessibility for each Key Stage to a range of systems and applications by:

- Planning and delivering one unit of work from the Rising Stars Computing scheme per term.
- Enabling each child's Computing experiences and skills to develop according to the school policy and NC requirements.
- Ensuring that Computing is incorporated in the planning of each subject's Schemes of work.
- Identifying some activities in which the emphasis is on the development of Computing capability and others which the emphasis is on the subject being supported by Computing.
- Monitoring, recording and assessing each child's experiences and achievements.
- Ensuring that each child has equal access to appropriate resources.
- Caring for classroom equipment with regard to security and children's safety.
- Informing the ICT co-ordinator or ICT technician of any defective or missing equipment.
- Developing his or her own professional competence to teach the subject.

2: Curriculum organisation

2.1 How NC capability is planned, monitored and delivered for all pupils.

In the most recent curriculum update, the subject of ICT has been renamed to computing and the following statement has been given:

"A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. 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."

(https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/239033/PRIMARY_national_curriculum_-_Computing.pdf)

From studying the new curriculum the following strands have been identified:

- Programming
- Digital Literacy
- Computer Science
- E-safety

In the context of the development of these Computing strands, it is envisaged that Computing will enhance the process of the teaching and learning in all areas of the curriculum. In particular, children should achieve the following skills and abilities:

Key Stage 1

- 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.

Key Stage 2

- 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.

ICT is taught using the following:

- The 'Computing Skills Progression', which is based on the new curriculum, is integrated into each year group's termly planning, as well as being taught in a Computing lesson each week.
- Computing skills are taught in a progressive way to support the national curriculum and integrated into subject areas where appropriate.
- Skills or a program introduction can be taught on the single classroom computer with the aid of the interactive whiteboard, before the children have their entitlement lesson in the computer room.
- Research during lessons via the Internet, access to programs to support lessons and access to individual personal folders is available in class by us of the mobile computer suite or iPads.
- iPads can be used to support learning across the curriculum and work saved on each individual iPad.
- Work can be stored on the server and completed later in the classroom.

2.2 How Computing is used to support the curriculum and integrated with it.

Computing equipment is distributed through the school to ensure an even spread of accessibility through each key stage to a range of systems and applications.

Interactive whiteboards are used as a teaching tool across all subject areas in the curriculum. All classrooms throughout the school, including Nursery, have been equipped with Smart interactive boards.

A fully integrated visual/sound projection system has been installed in both Key Stage Halls. This facility offers internet access and access to the school server and high quality sound system.

iPads are being used and their implementation developed with teaching staff across all NC subjects.

Audits are carried out annually to determine which subject software is needed to support the Computing policy and to support individual and integrated subject areas. Software is grouped into subject areas and suitable age ranges in the two Key Stages.

A curriculum audit will be carried out each spring to determine if extra software is necessary and which site licences need up dating.

Differentiation within Computing to support NC subjects is by means of outcome and differentiated task. It has been found that success in Computing leads to higher self-esteem and increased motivation, in some cases pupils who have special needs in other areas are quite adept at using the computer and can help their fellow pupils to good effect.

2.3 How progression is planned, monitored and supported

The 'Computing Skills Progression' should be used to generate and plan learning objectives. Skill progression requirements are monitored, developed and updated by the ICT co-ordinator. Computing skills are linked whenever possible to support and enhance other subject areas. Progression is built into yearly schemes of Computing skills/class records and these recording sheets are passed to the next class teacher and included in the class file. Monitoring and assessment are ongoing. Pupils keep a record of their work in their own folder that is located within the 'class colour folder' and stored on the server. The class maintain their 'class colour' when they move up to the next year group. A class in reception given the colour gold, will maintain that colour until they leave our school in year 6. This allows staff and the ICT coordinator to monitor and assess work. Children are also able to look back at their own work from previous years. This system has been in operation since November 2003.

3: Equal opportunities

In line with all of our school policies, all pupils will have equal opportunities to use ICT according to their needs. Staff will support and ensure that all children have the access to the Computing curriculum in order to enable them to realise their full potential.

The ICT co-ordinator and SENCO will advise teachers and parents on the ICT support which can be provided to individual children with particular educational needs, including high ability children. Some children in Year 5 have the opportunity to attend a weekly Computing club. Children are also allowed access to computers in classrooms at break and lunchtimes to complete work and research according to the discretion of the class teacher. (For guidelines on Internet access see Internet Access Policy.)

There is flexibility within the ICT suite timetable for pupils with special needs. A range of special needs software has been identified and purchased for use in all areas of the school. Children who have computers at home are encouraged to use them for educational benefit and parents are offered advice where practical.

Over the last few years, the school has purchased a number of Lexia licenses to support low ability children in reading and spelling. The schools resources are currently being maximised to allow as much access to Lexia as possible. Children attend early clubs and after school clubs to work on Lexia as well as during the school day. This intervention has had a great effect on the progress and confidence of these pupils.

4: Curriculum administration

Computing is taught as formal class teaching, often to introduce a skill or a new program, as one to one, or as a group, for example in a maths data-handling lesson. Pupils learn skills in a variety of ways depending upon the situation in which Computing is being used and the content of the work being carried out. Numeracy and Literacy skills will form an integral part of these experiences.

4.1 Internet Safety

Photographs will only be used with parental/guardian permission, they will not allow identification of individual children.

Children will only be allowed to use the Internet with a member of staff present.

All children from Year 1 upwards, will be taught an awareness of the potential dangers of internet use. The government's 'Think You Know' internet site will be used as a guide.

Staff / governors will receive internet safety training and updates when necessary.

The school also has its own Internet Safety Policy.

The school will display posters highlighting the dangers of the internet.

Teachers will deliver assemblies and PSHE lessons discussing internet safety.

Over the last few years, a theatre company has come into school to perform a play based around the importance of e-safety. This will continue next year.

Each unit of work will have an e-safety strand and the importance of this will be highlighted and discussed with children.

5: Resource management- Human

5.1 Professional Development

Computing training is usually carried out in Inset time or staff meetings. This training is identified by staff needs and driven by the requirements of the NC. The ICT Technician and co-ordinator are available for on-going advice and training.

Technical Support

Technical support is provided by:

1. The ICT Technician
2. Network administrator (Sunderland ICT Services)
3. ICT co-ordinator
4. One day onsite warranty provided by leasing companies.

6: Resource Management – Physical

6.1 Managing Resources

All computers and other ICT equipment are presently located in classrooms and in the computer suite. iPads and laptops are stored in the ICT room and returned there at the end of the day.

6.2 Hardware Resources

A review of hardware is being carried out continually. This is discussed with the ICT Technician, ICT co-ordinator, Head teacher and senior management team.

1. All computers in the school are connected to the internet
2. Replacement/upgrading of computers to cope with more modern programs is on-going
3. Two mobile suites of sixteen laptops assist in the integration of Computing in all areas of the curriculum.
4. A mobile set of iPads also assist in the integration of Computing in all areas of the curriculum.
5. Fully integrated sound/visual system in place in both Key Stage Halls.
6. Information display screen for keeping parents and visitors up to date with events is located in the entrance area of the school.

6.3 Software Resources

A software audit is carried out annually and we have an on-going policy to purchase any software necessary to support the NC. Subject specific software is selected by the subject leader after consultation regarding compatibility and trial.

6.4 Access to Information Technology

Each classroom (including nursery) has a suitable computer which is connected to an interactive white board. Pupils are allowed access to computers outside of lesson time only with permission from the class teacher.

Internet access is supervised and bookmarked sites are encouraged. Staff or suitable adults supervise use and children follow guidelines set out in the Internet usage policy.

The ICT Suite facilities are currently afforded to the local community via the Breakfast and Afterschool Clubs.

6.5 School Website www.ehpa.co.uk

The school website is continually being developed by the ICT Technician. The site offers pupils, parents and staff relevant information and links to other useful sites.

6.6 Health & Safety

Use of ICT equipment in school will conform to the Local Authority Health and Safety guidelines.

Introduction of the wireless network facility (for use with mobile suite and teacher's laptops) followed consultation and advice from experts.

All plugs and other electrical equipment are checked on a regular basis to PAT standards by a qualified electrician.

A fire extinguisher is in place in the ICT room.

7: Management Information System

The school is linked to the local Education Authority's Intranet for administrative purposes. The Authority provides training and is responsible for supporting the system.

8: Communication system

Parents receive emails and text alerts regarding matters regarding upcoming events, newsletters and so forth. Paper letters are also sent home to parents on a regular basis. Every year children will receive a letter regarding e-safety.

9: Evaluation

9.1Assessing, Recording & Reporting

Assessment is on-going and recorded on yearly skills and records, which are passed to the next class teacher. Pupils keep a record of their work in their own folders; these are located on the server.

Nursery and reception pupil reports are compiled using a template within MS Word. All other pupil reports will be compiled, processed and printed each term, using statements compiled from appropriate learning objectives. Individual class teachers will undertake this task.

9.2 Monitoring, Evaluation & Review

This policy will be monitored and reviewed at regular intervals. This will be the primary responsibility of the ICT co-ordinator who will liaise with the SMT and staff.

Review date: June 2017