Enfield Academy of New Waltham
Computing Policy

Introduction

The use of information and communication technology is an integral part of the national curriculum and is a key skill for everyday life. Computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Enfield Academy we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively. The purpose of this policy is to state how the school intends to make this provision. This policy supports the ELT computing curriculum which ensures all teachers are following a balanced and challenging curriculum. Those with mixed year groups are ensuring the children meet all the objectives, keeping a record of the objectives being taught.

Aims

- To enable children to become autonomous, independent users of computing, gaining confidence and enjoyment from their activities
- To develop a whole school approach to computing ensuring continuity and progression in all strands of the computing National Curriculum
- To use computing as a tool to support teaching, learning and management across all areas of the curriculum
- To provide children with opportunities to develop their computing capabilities in all areas specified by the Curriculum.
- To ensure ICT is used, when appropriate, to improve access to learning for pupils with a diverse range of individual needs, including those with SEN and disabilities
- To maximise the use of computing in developing and maintaining links between other schools, the local community including parents and other agencies.
- To ensure computing is embedded into all areas of the curriculum.

Objectives

In order to fulfil the above aims it is necessary for us to ensure:

- a continuity of experience throughout the school both within and among year groups
- the systematic progression through key stages 1 & 2
- that the National Curriculum programmes of study and their associated strands, level description and attainment target are given appropriate coverage

- that all children have access to a range of ICT 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 we respond to new developments in technology
- that staff skills and knowledge are kept up to date
- to develop the understanding of how to use ICT and computing safely and responsibly.

The national curriculum for computing aims 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.

Rationale

The school believes that ICT and computing:

- Gives pupils immediate access to a rich source of materials.
- Can present information in new ways which help pupils understand access and use it more readily.
- Can motivate and enthuse pupils.
- Can help pupils focus and concentrate.
- Offers potential for effective group working.
- Has the flexibility to meet the individual needs and abilities of each pupil.

Curriculum development and organisation

The ELT curriculum is to be used to form the medium term plan and short term plans for computing on which are:
Learning objectives, activities (differentiated), vocabulary and assessment. The three main areas of computing digital literacy, computer science and information technology are clearly taught and understood by staff and pupils. Adaptations are made to ensure the plan is progressive in developing pupil capability. These are used as working documents to identify time markers, additional resource needs and to indicate whether optional activities have been undertaken.

Each class is allocated time with the Laptop trolley and iPads. These can then be used furthermore if needed during cross-curricular teaching.

Early Years

It is important in Early Years to give children a broad, play-based experience of ICT in a range of contexts, including outdoor play. ICT is not just about computers. Early years learning environments should feature ICT scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to 'paint' on the whiteboard or programme a toy. Recording devices can support children to develop their communication skills. This is particular useful with children who have English as an additional language.

Key Stage 1

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.

Key Stage 2

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.

Resources and access

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible pc system by investing in resources that will effectively deliver the strands of the national curriculum and support the use of ICT and computing across the school. Teachers are required to inform the computing leader of any faults as soon as they are noticed. Resources, if not classroom based, are located within the Junior Corridor or near the hall. ICT and computing network infrastructure and equipment has been sited so that:

- Every classroom from Foundation Stage to Y6 has a computer connected to the school network and an interactive whiteboard with sound and DVD facilities.
- There are two laptop trolleys in school containing 48 laptops with internet access available to use in classrooms as well as 100 IPads in separate charging stations.
- Each class from Early Years to Y6 has an allocated session across the week for teaching specific ICT and computing skills
- The laptops and IPads are available for use throughout the school day as part of ICT and computing lessons and for cross curricular use. A timetable is created for the use of these, which clearly identifies which sessions they are available to all.
- Pupils may use ICT and computing independently, in pairs, alongside a TA or in a group with a teacher.
- It is the member of staff's responsibility to put away the IPads properly to ensure they are sufficiently charged. Pupils should not be allowed to put IPads away - this is to ensure equipment is kept safe.

Pupils' progress and continuity

- Modules will be designed with each of the computing aspects clearly identified along with appropriate progression and opportunities for assessment. Pupil progress towards these objectives will be recorded by

teachers as part of their class recording system. Staff will follow medium term plans with objectives set out in the national curriculum.
- Where possible pupils will be encouraged to train and assist their peers.
- Pupils will use computing capabilities to support learning in other curriculum areas including core and foundation subjects.
- Staff will use a range of teaching styles in teaching computing i.e. whole class, small group and individual use of ICT equipment.
- Provision will be made for differentiation in order to develop the potential of the more able child as well as that for the less able pupil.

Internet Safety

Please see separate policy

Inclusion

At Enfield, we believe that all children have the right to access ICT and computing. We teach ICT and computing to all children, whatever their ability. ICT and computing forms part of the national curriculum to provide a broad and balanced education for all children. Through the teaching of ICT and computing we provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's different needs. Where appropriate ICT and computing can be used to support SEN children on a one to one basis where children receive additional support.

Equal opportunities

Enfield Academy will ensure that all children are provided with the same learning opportunities regardless of social class, gender, culture, race, disability or learning difficulties. As a result we hope to enable all children to develop positive attitudes towards others. All pupils have equal access to ICT and computing and all staff members follow the equality scheme policy. Resources for SEN children and able learners will be made available to support and challenge appropriately.

Health and safety

The school is aware of the health and safety issues involved in children's use of ICT and computing. All electrical appliances in school are tested accordingly. It is advised that staff should not bring their own electrical equipment in to school but if this is necessary, then the equipment must be pat tested before being used in school. This also applies to any equipment brought in to school by, for example, people running workshops, activities, etc. and it is the responsibility of the member of staff organising the workshop, etc. to advise those people. All staff should visually check electrical equipment

before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the office or computing lead who will arrange for repair or disposal.

Security

- The ICT provider will be responsible for regularly updating anti-virus software.
- Use of ICT and computing will be in line with the school's 'acceptable use policy'. All staff, volunteers and children must sign a copy of the school's AUP.
- Parents will be made aware of the 'acceptable use policy'.
- All pupils and parents will be aware of the school rules for responsible use of ICT and computing and the internet and will understand the consequence of any misuse.

Cross curricular links

As a staff we are all aware that ICT and computing capability should be achieved through core and foundation subjects. Where appropriate, ICT and computing should be incorporated into schemes of work for all subjects. ICT and computing should be used to support learning in other subjects as well as develop ICT and computing skills.

Parental involvement

Parents are encouraged to support the implementation of ICT and computing where possible by encouraging use of ICT and computing skills at home during home-learning tasks. They will be made aware of e-safety and encouraged to promote this at home.

Policy Date: October 2020
Review date: Annual