



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 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. The policy should be read in conjunction with our scheme of work for computing - Knowsley Computing Scheme of work - which sets out in detail what pupils in different classes and year groups will be taught and how computing can facilitate or enhance work in other curriculum areas.

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 National 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.

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
- a systematic progression through Key Stages 1 & 2
- that the National Curriculum programmes of study and their associated strands, level descriptions and attainment targets 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
- that children 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 Knowsley Scheme of Work is to be used to form the medium and short term plans for computing, on which are: learning objectives, activities (differentiated), vocabulary and assessment.

Adaptations are made to ensure the plan is progressive in developing pupil capability. These plans 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 further, 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 particularly 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 a sequence of instructions
- Write and test simple programs
- Use logical reasoning to predict and computing the behaviour of simple programs
- Use technology purposefully to create, organise, store, manipulate and retrieve data in a range of digital formats
- Recognise common uses of information technology beyond school
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

Key Stage 2

By the end of Key Stage 2 pupils should be taught to:

- Design and write 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; generate appropriate inputs and predicted outputs to test programs
- Use logical reasoning to explain how a simple algorithm works 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
- Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect

individuals and intellectual property; use technology responsibly, securely and safely

- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- Use technology safely, respectfully and responsibly; recognising 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 KS2 Corridor. ICT and computing network infrastructure and equipment has been sited so that:

- Every classroom from Reception to Y6 has a computer connected to the school network and an interactive whiteboard with sound and DVD facilities.
- There is one laptop trolley in school containing 30 laptops with internet access available to use in classrooms, as well as 30 I pads in a separate charging station.
- Each class from Reception to Y6 has an allocated slot across the week for the teaching of specific ICT and computing skills
- The laptops and I pads 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 the sessions available to all.
- Pupils may use ICT and computing independently, in pairs, alongside a Teaching Assistant or in a group with a teacher.
- Adults are responsible to put away the iPads and laptops properly to ensure they are sufficiently charged. Pupils should not be allowed to put iPads and laptops away - this is to ensure equipment is kept safe.

Pupils' progress and continuity

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

teachers as part of their class recording system. Staff 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 use a range of teaching styles in teaching Computing i.e. whole class, small group and individual use of ICT equipment.

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.

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 are made aware of the 'acceptable use policy'.
- All pupils and parents are 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 are made aware of e-safety and encouraged to promote this at home.

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