



Glen Hills Primary School

Computing Policy

Introduction.

This document is a statement of the aims, principles and strategies for Computing at Glen Hills Primary School.

What is computing?

The 2014 national curriculum introduces a new subject, computing, which replaces Information communication technology. This represents continuity and change, challenge and opportunity. It gives schools the chance to review and enhance current approaches in order to provide an even more exciting and rigorous curriculum that addresses the challenges and opportunities offered by the technologically rich world in which we live.

Computing is concerned with how computers and computer systems work, and how they are designed and programmed. Pupils studying computing will gain an understanding of computational systems of all kinds, whether or not they include computers. Computational thinking provides insights into many areas of the curriculum, and influences work at the cutting edge of a wide range of disciplines.

The Acceptable Use of Computing Policy and the E Safety Policies should also be read in conjunction with this policy.

Aims

Our Computing aims:-

- To provide all pupils and staff with opportunities to develop their computing capabilities.
- To allow pupils and staff to gain confidence and enjoyment from their computing activities and to develop skills which extend and enhance their learning throughout the curriculum.
- To develop pupils' awareness of the use of computers not only in the classroom but in everyday life.
- To allow pupils to evaluate the potential of computers and also their limitations e.g. to learn about issues of security, confidentiality and accuracy.
- To develop logical thinking and problem solving.
- To provide opportunities for pupils to gain knowledge of a variety of computing tools and equipment.
- To encourage pupils to become autonomous, independent, users of computing both as a Learning resource and as a discipline in its own right.
- To develop a whole school approach to computing ensuring continuity and progression.

The new National Curriculum presents the subject as one lens through which pupils can understand the world. There is a focus on computational thinking and creativity, as well as opportunities for creative work in programming and digital media.

The introduction makes clear the three aspects of the computing curriculum: computer science (CS), information technology (IT) and digital literacy (DL).

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.

Entitlement

The new National Curriculum states that pupils should be taught to:

	Key Stage 1	Key Stage 2
Computer Science	<p>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</p> <p>Create and debug simple programs</p> <p>Use logical reasoning to predict the behaviour of simple programs</p>	<p>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>Understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web</p> <p>Appreciate how [search] results are selected and ranked</p>
Information Technology	<p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>Use search technologies effectively</p> <p>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</p>
Digital Literacy	<p>Recognise common uses of information technology beyond school</p> <p>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</p>	<p>Understand the opportunities [networks] offer for communication and collaboration</p> <p>Be discerning in evaluating digital content</p> <p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>

Implementation

At Glen Hills Primary School, computing will be taught both as a discrete subject, and in a cross-curricular way when the opportunity presents itself.

The Computer Suite, netbooks and iPads will be used to help pupils access the Computing curriculum, along with a range of other resources such as programmable toys.

Health and Safety

Computer systems and netbooks will not be placed near magnets, radiators or have trailing wires which can be tripped over. All computer use should be in accordance to the school's Health and Safety Policy and Procedures.

Pupils will not normally work in front of a computer screen or netbook for more than half an hour of continuous work at one time.

For safe access for the internet please refer to the Acceptable Use Policy.

School Management of Hardware and Software

Purchasing

Hardware and software for the development of Computing capability will be recommended for purchase by the Computing Coordinator in consultation with the Headteacher and staff. Software for specific subjects will be recommended by subject Coordinators in consultation with the Computing Coordinator.

Organisation of Hardware

Computer systems in school will be marked so that they can be identified by the School Inventory. Computer systems are not the property of a particular year group and can be moved around by the Computing Coordinator as they feel the need arises. However the Computing Coordinator will ensure that all year groups have equal access to computer systems over the course of the academic year.

Access to Computing

Pupils with Special Educational Needs

Pupils with Special Needs have the same Computing entitlement as all other pupils and are offered the same curriculum. However, in addition particular applications of Computing are used for pupils with difficulties in learning, who need to be motivated to practise basic skills regularly and intensively, and thus benefit from the use of programs in which skills practice is set in the context of a motivating game.

Strategies for Ensuring Progress and Continuity including planning

Long term plans will be drawn up by the Computing coordinator indicating coverage of the curriculum. Planning for the use of Computing is a process in which all teachers are involved through their medium term plans.

Staff meetings are used to discuss the use being made of Computing across the curriculum and ensure consistency of approach and of standards.

Medium Term Planning which is drawn up by individual teachers and is monitored by the coordinator all include proposals for integrated Computing use.

A selection of children's work is sampled each year to create a portfolio to monitor coverage of units and the quality of teaching.

Comment [RJ1]: 'by' missing

The Role of the Computing Coordinator

The role of the Coordinator is to:-

- Take the lead in policy development and the integration of Computing into schemes of work designed to ensure progression and continuity in pupils' experience of Computing throughout the school.
- Support colleagues in their efforts to include Computing in their development of detailed work plans, in their implementation of those schemes of work and in assessment and record keeping activities.
- Monitor progress in Computing and advise the Headteacher on action needed.
- Take responsibility for the purchase and organisation of central resources for Computing.
- Take appropriate steps to keep up-to-date with developments in this rapidly changing field and pass on information to colleagues as appropriate.
- To liaise with the technician to ensure school systems are in good working order.

Comment [R2]: Is this pupil progress or digital world progress ?

Comment [R3]: on

Assessment

Assessment is used to guide the progress of individual pupils in their use of Computing. It involves identifying each child's progress, determining what each child has learned and what therefore should be the next stage in his/her learning. Teachers will need to update Symphony Computing grids at the end of each term. Teachers should also identify the skills which have been met from the Symphony Key Skills document. It is important to identify what progress the children have made because it can often become masked when working in groups.

Strategies for Recording and Reporting

Records of progress in Computing kept for each child should contain evidence of each the skills they have attained as well their progress in Computing capability. Reporting to parents is done on a termly basis through interviews and annually through a written report. Reporting on Computing use will focus on each child's ability to use a computer with apply their skills not their competence in using specific programmes.

Staff and Pupils Usage

Staff are encouraged to use computers at work or take computers home in order to prepare resources or to develop personal competence and confidence in the use of Computing. Class Monitors in the form of self-selected pupils who are eager and interested in the use of Computing are used in many classrooms to set up equipment and as "experts" in various applications able to advise peers if they encounter problems. Care is taken to involve girls equally in this role.

Health and Safety and Computing

Health and Safety issues in Computing include:-

- Taking care with setting up and moving equipment.
- Establishing appropriate working conditions.
- General electrical safety.
- Taking regular stops to stare into space away from screen approx. every 20 minutes to avoid eyestrain.

Trouble Shooting

There is a trouble shooting form in ICT suite. When either a software or the hardware fault occurs on a system check with the technician if available and the Computing coordinator if not. If the problem cannot not fixed immediately then the machine should be switched off at the plug and the pupils directed to another activity. The technician will be contacted and the problem fixed as soon as possible.



Policy	COMPUTING
Reviewing Committee	Curriculum Committee
Last Reviewed	
Ratified by Governing Body	