Computing Policy 2016

Vision: Computing should provide a stimulating and enjoyable tool which enables good quality teaching and learning to take place. It will be a vehicle through which each curriculum area and other aspects are supported. It should allow all children to make excellent progress and enable teachers to teach more efficiently and effectively. Other than for the teaching of specific skills, computing should be subsumed and embedded within each subject area. We are mindful of the rapid rate of progress in the area of technology and aim to keep abreast of advances in order to prepare our children for the twenty first century. Each child should be able to choose and access computing related tools and use them with confidence to meet curriculum needs. Staff should use their computer to assist them in administration tasks to reduce workload and give a more efficient access to a greater amount of data. The school computing infrastructure should be robust and reliable, ensuring efficiency and appropriate access.

Aims

- To ensure that every child has access to, and experience of, hardware and software in all areas of computing so that they are able to achieve the highest level of competence and understanding.

- To develop the computing capability of each child such that they develop skills and apply these skills to the solving of relevant and worthwhile problems.
- To enable each child to understand the capabilities and limitations of computing and the implications and consequences of its use.
- To enable children to appreciate the relevance of computing in our society.

Objectives

In the teaching and learning of computing children will have the opportunity to use computers and other devices to:

- Plan, develop and evaluate their work.
- Handle data, sequence instructions and model different situations.
- Use logical reasoning to explain how algorithms work
- Design, write and debug programs
- Understand how computing networks operate (including the internet)
- Find, use and communicate information.

Background

The Nature of Information and Communications Technology.

Computing capability in our primary school is concerned with the children using and applying computing tools and information sources. This will include (but is not limited to) the use of computers (netbooks, desktop PCs, tablets), interactive whiteboards, the Internet, programmable robots and toys, electronic keyboards, tape recorders, video cameras, web cams, voice recorders, calculators, spell checkers, digital still and video cameras, microscope, geo trackers and data loggers.

The nature of computing means that it will be used across the curriculum, supporting and enriching the child's learning experiences. Children will have experience in four specific areas: finding things out; developing ideas; exchanging and sharing information; review , modify and evaluate work.

Implementation.

The teaching of computing reflects and enriches the themes identified by the

Computing Policy

new National Curriculum. It is organised:
  • In a cross-curricular way to support and enhance whole school topic plans and individual subject areas, especially literacy and numeracy.
  • In units covering the strands to develop the progression of computing skills.

Computing will be taught by the class teacher (with support from a Higher Level Teaching Assistant in Early Years) and with support from the Computing co-ordinator. Learning activities are sequenced to ensure continuity and progression and are taught in a variety of ways.

  • Direct class teaching to introduce a specific skill or program.
  • Through practical tasks using the appropriate hardware and software.
  • Group activities, so that children interact with each other.
  • By providing children with a real experience in the practical applications of computing skills.

Planning

Skills detailed in the scheme of work relevant for each year group are taught in each block as is E-Safety. Samples are work from each unit are saved to the shared area and kept evidence.

Classroom computers and electronic whiteboards
Planning is undertaken by the class teacher with support from the Computing & subject co-ordinators and is shown on the planning kept on the shared area. Computing is used in the classroom to support and enhance the curriculum. Interactive whiteboards are used to assist in the delivery of lessons and to provide an opportunity for the children to use interactive resources.

Safety

  • Children are always supervised by an adult.
  • All KS2 classes have Impero which allows the class teacher to monitor every net book and also to control it if necessary. The ipads are subject to the same internet filters as the rest of the school.
  • E safety is covered in each class by the class teacher. An schools scheme of work, taken from the government's *ThinkUknow* scheme is in place around the school. Any area not covered in the unit of work is covered in PSHE. Esafety assemblies are held annually to tie in with the work done in the classes which is taught in a block.

- Equipment and wiring is checked annually by a PAT(Portable Appliance Testing) technician supplied by Interserve
- Appropriate risk assessments are completed by the computing coordinator, regularly.
- Health and safety regulations are adhered to.
- All monitors are positioned at an appropriate distance and are situated on a secure surface.
- Internet Safety (See Internet policy) children will be supervised when accessing the internet.
- Mobile Phones (See Mobile phone policy) The computing technician holds one mobile phone, which is used around the school to talk to technical support, while sitting at the required system. It is not used for any other purpose.
- Cameras (See Use of Images policy)
- Official guidelines are adhered to in respect of Data Protection.
- The school uses a safe and secure ISP(Internet Service Provider) provided by ICT4 for the Internet especially designed for the use of school children.
- No program files are to be downloaded onto the system, without permission from the Computing coordinator or technician.
- Only staff USB sticks are to be used (No USB stick that a child has brought in from home) and are to be scanned regularly to check for viruses. Children that wish to bring in work from home may send their work to school using email and the class email address or put it on their area of the school's VLE (Visual Learning Environment).
- Visiting users are given a special visitor user name and password and do not have access to the staff shared area or the children's shared area.
- Other agencies using computers on the school premises must agree to the school's Computing Policy and Internet Policy.

There is a log of ICT/computing incidents which is held by the computing co-ordinator.

Health

Physical Health
- Health & Safety regulations are adhered to. E.g monitors are positioned properly such that glare and strain are reduced.
- Data projector light is positioned correctly to avoid 'blinding' any user and is subject to a risk assessment.

<u>Psychological Health</u>

- Mental well -being is promoted by learning activities which promote challenge, allow achievement and which are fun.
- Children are taught how to deal with abusive behaviour, such as cyberbullying.
- A positive atmosphere is established by having positive behaviour rules.
- Access to the Internet for information on health is available.

Enjoyment & Achievement

- The children will have the opportunity to work both individually, in pairs and in small groups and will have experience of computing for at least an hour a week pro rata over the school year.
- Increasingly the children will become more independent in their use of computing and the choice of software required for any curriculum activity.
- 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.
- 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.
- Pupils of high ability who may be extended through the use of programs which offer challenge and opportunities for investigation.
- All children, irrespective of age, gender, ethnicity, social circumstances, physical or intellectual ability will have the opportunity to become confident in the use of computing.
- Training is given regularly to teaching and support staff.
- There is a commitment to ongoing expenditure on hardware, software and training.
- Technical support is provided by a technician from ICT4 once a week and by an in school technician (15hours a week)
- Children have control of their own work through their own e-portfolio kept in their space on the school network.
- The children know the level they are working at and how to get to the next one through the use of self assessment and progression ladders.
- Assessment for Learning techniques are used in order to enable child to

progress at the right pace.
- Children use computing to develop a sense of awe and wonder and appreciation of the complexity of the universe and their place within it.

Economic Well-Being

- Children are taught the importance of well presented work.
- Children are taught about new trends and computing in the 'real world'.
- Children are taught and encouraged to think about and discuss the social and economic effects of developments in computing.
- Children are taught to use generic skills that may be used in future work or employment.
- Children are taught why it is necessary to be computer literate.
- Children learn about other cultures through the Internet, e-mail and software programs.
- Children are taught to evaluate the environmental impact of computing E.g. more economic use of printing paper.
- Children are taught how to access different kinds of information and how to evaluate it and keep safe.

Positive Contribution

- All children can contribute to lessons through the use of Interactive whiteboards through the use of net books, laptops and iPads.
- Software is purchased that enables children with learning difficulties to make a positive contribution.
- Children are taught how to use a variety of software process information for a range of audiences.
- Excellent work is celebrated by display and rewards.

Record Keeping and Assessment

Computing is assessed in a variety of ways.
- Observation of a child or group on task.
- Discussion with children about their work.
- E– portfolio of saved work.
- Printouts of tasks.
- National Curriculum achievement
- Assessment level given by teacher at the end of each year.

- Children's own evaluation of their work.
- Each teacher will keep a record of the computing activities covered by each child.

Reporting to parents is done through interviews and annually through a written report.

Summative assessment is carried out at the end of each National Curriculum Key Stage through teacher assessment.

The computing co-ordinator collects the planning , views samples of work kept on Server and the assessment level for each child for each unit of work throughout each year to monitor the work being covered.
Lessons observations include an assessment of the computing used.
EYFS use iPads to assist in the assessment and record keeping required in the foundation stage.

The school uses an online record keeping program called Target Tracker to store and monitor pupil progress against national curriculum targets.

Class teachers use their iPads to record evidence of progress. We hope that this will integrate with target tracker in the near future.

Resource Management

See audit for complete inventory of hardware and see computing coordinator's file for software licenses.
Each classroom should have:
- at least one computer.
- Key stage 1 and EYFS ~ access to a bank of 32 laptops, 32 iPads
- Key Stage 2 ~ a netbooks on a 2:1 ratio (30 per year group) and access to 32 iPads
- a set of calculators is available for all key stage 2 classes, Infant classes have access to a set of calculators.
- a set of documentation (where appropriate), including software toolkit.

Software and all other hardware is stored centrally or with the computing co-ordinator and is available to all staff. This is the responsibility of the computing co-ordinator. A resource file of ideas and worksheets and software manuals is kept by the computing co-ordinator but is available to all staff. The day to day care and operation of the classroom computers is the responsibility of the class

teacher. The care and operation of the computing suite is the responsibility of the computing co-ordinator. Any breakage or problems are notified to the co-ordinator.

Security: All hardware is security marked and logged on the PARAGO asset management system.

Action Plan 2015 -2016

Area	Action
Continue to develop a vision for future computing development	Computing co-ordinator and technician to visit BETT show with
Integrate Computing into the day to day formative assessment of children	Purchase iPads for staff to use with target tracking system.
Ensure that parents are up to date with the school's and their own responsibilities regarding E-safety	Hold parents' meeting(s) at convenient times for parents.
Renew the school's provision of computers	Deploy new computers into the curriculum pool. Deploy new iPAds into the curriculum pool
Renewal of equipment related to computing	Follow the school's renewal schedule of renewal.

Monitoring

The computing co-ordinator monitors the progression and continuity, by the collection of termly plans, monitoring individual lesson in the computer suite, compilation of a work bank of tasks is kept on the main server or on a DVD and discussions with the children.

Success Criteria

- Skills as defined in Scheme of work achieved.
- Positive feedback from staff.
- Children are safe and independent in the use of hardware and capable of deciding when the use of Computing is appropriate.

<u>Review</u>

The Headteacher and staff will review this policy in January 2017.   Any suggested amendments will be presented to the Governors for discussion at their next appropriate meeting.

Ratified at Full Governing Body Meeting: **15 March 2016**

Date of next review: **March 2017**