COMPUTING POLICY

Chapel en le Frith
C of E VC Primary School

DATE AGREED	REVIEWED ON	NEXT REVIEW	COMMITTEE	MINUTE NO	SIGNED
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Chapel-en-le Frith C of E VC Controlled Primary School

Computing Policy

INTRODUCTION

This policy outlines the aims, principles and strategies for the teaching and learning of computing at Chapel-en-le-Frith C of E VC Primary School.
The policy has been drawn up as a result of staff discussion and has the full agreement of the Governing Body. The implementation of this policy is the responsibility of all the teaching staff.
The policy will be reviewed every 3 years or earlier if required.

Purpose of Study

History is likely to judge this period of time as the age of technology and as such our pupils will both grow up and work within an ever changing environment immersed in technology. Many are likely to be doing jobs and using technologies that currently don't exist. As a result, it is our aim to ensure that all pupils have the opportunity to acquire and apply the skills they will need and compete with their peers.

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. Buildings 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.

Aims

The national curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- 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

Subject content

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

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

HOW WE TEACH COMPUTING

The school has laptops available in both KS1 and KS2 alongside the availability of iPads. There are networked laptops in the classrooms, as well as interactive whiteboards, visualisers, which can be connected to computers for whole class teaching.

All class areas have access to the Internet. This must be used by children under supervision at all times. An awareness of E-Safety is vital and we give pupils the skills needed to use the internet safely (See Online Safety policy).

Computers should be used by children in school, for class and schoolwork only and should be supervised by an adult at all times.

A range of styles is necessary for the teaching of Computing. Approaches need to be related to the topic itself and to the abilities and experience of the pupils. Computing teaching at all levels will include demonstrations to the whole class, group work and individual work.

The school's computing scheme of work contains full details of the learning stages of Computing, the links across the National Curriculum and the skills that need to be developed in each year.

In the delivery of computing there will be a range of whole-class instruction or demonstration, group teaching and individual practice.

Individual pupil access
All pupils will be issued with their own user name and password to login this teaches them the correct procedure and assists with accountability.

INTERNET ACCESS
The purpose of Internet access within the school is to raise educational standards, to support the professional work of staff and to enhance the school's management information and business administration systems.

E Mail
Any pupil wishing to send and receive email must agree that;

- Communication with persons and organisations will be managed to ensure an appropriate educational use, and that the good name of the school is maintained
- Pupils may be asked to send email as part of a lesson, but will not have, and may not use their own external email account.

Email must be approved by a teacher, or other adult, before being sent.

Internet
In common with other media, such as magazines, books and video, some material available via the Internet is unsuitable for pupils. The school will take all reasonable precautions to ensure that users access only appropriate material.

It is not possible to guarantee that particular types of material will never appear on a screen. Neither the school nor Derbyshire County Council can accept liability for the material accessed, or any consequences thereof. (From November2012) the school has access to filter settings and adjustments can be made when required.

During research projects on the Internet the children may use approved links to websites that are listed within links section on the school website. Pupils will be given the skills needed to safely use the internet and what to do if they have any issues or concerns.

Staff will assess new sites before allowing pupils to access them. (UKS2 will also practice safe searching)

Pupils will be expected to follow the guidelines laid down for them at all times.

We will occasionally publish photographs of children and their work onto the school's website. This will be only for children for whom written permission has been obtained by the school. Any reference within a piece of work to children's surnames, addresses, and other contact details will be edited out before publication.

Using the Internet for effective learning

- Internet access will be planned to enrich lessons as an integrated part of the curriculum
- Pupils will be given clear objectives
- Pupils will be given a list of relevant sites (UKS2 will practice safe searching)
- Pupils will become responsible for accessing the Internet themselves
- Pupils will be informed that regular checks of files and documents can be made
- Pupils using the Internet will be supervised appropriately
- The school and the LA will work together with the Internet Service Provider to ensure systems to protect pupils are reviewed and improved

LINKS WITH OTHER AREAS OF THE CURRICULUM

Links will be made to Computing within other subjects so pupils can develop and apply their Computing skills.

Each unit offers children opportunities to develop their use of language. Both language development and learning in Computing are reinforced and clarified by:

- Speculating, discussing, explaining and comparing;
- Listening and reading;
- Predicting, sequencing ideas and suggesting alternatives.

Some units provide opportunities for children to develop mathematical skills through working with numerical data relating to real situations.

HOMEWORK

Although separate Computing homework is not set, children are encouraged to complete homework tasks using home PCs. This may include researching a topic, presenting work, art-based tasks or accessing specific sites to develop maths skills. However, no child will be discriminated against if he/she does not have access to a computer or internet at home.
Memory sticks or CDRoms from outside school will not be used on school.

TRAINING

By nature the computing curriculum is liable to change frequently.
The introduction of new hardware and software has implications for inset training and it will be part of the school's development plan to address the needs of all staff in the use of computing. When necessary a programme of in service training will be established and help documents will be available for all teachers for pre loaded software.

An annual audit will be undertaken to establish the availability and use of programs and it will be the specific duty of the named Computing co-ordinator to ensure that all staff are suitably equipped and informed of any developments. It will also be the responsibility of the co-ordinator to ensure that planned advice and assistance is given throughout the school.

RECORD KEEPING AND ASSESSMENT

Assessment will be used to inform teaching in a continuous cycle of planning, teaching and assessment. Assessment will be an informal part of every lesson to check pupils' understanding and give information which will then inform day-to-day lesson plans.
Pupils' saved work will provide a portfolio of their attainment.

Accurate information will be reported to parents and the child's next teacher.

EQUAL OPPORTUNITIES

The school's Equal Opportunities Policy applies to the teaching of computing, as to all other subjects. All pupils will be encouraged to work to the best of their abilities.

HEALTH AND SAFETY

The school Health and Safety Policy applies to the teaching of computing as to all other subjects.

Staff should be aware of some specific safety aspects of using computers e.g.

1. Computers will not be placed near radiators or in front of heaters
2. They will not have trailing flexes which can be tripped over
3. No food or drinks will be allowed near computers
4. Pupils will not normally work for more than an hour in front of a computer screens and have a break when needed.