TICKHILL ESTFELD PRIMARY SCHOOL

COMPUTING POLICY

SEPTEMBER 2016

Rationale

Computing is concerned with the storage, processing, presentation and communication of information by electronic means. This includes the measurement, modelling and control of external events. Computing continues to evolve very quickly and has now become firmly entrenched in many aspects of everyday life, both at home and in the workplace.

As computing underpins today's modern lifestyle at Estfeld School we believe that it is essential that all pupils gain the confidence and ability, to prepare them for the challenge of a rapidly developing technological world. The use of computing will also enhance and extend children's learning across the whole curriculum whilst developing motivation and social skills.

Aims of Computing

At Tickhill Estfeld Primary School our aims are that:

- Children can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Children can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.
- Children can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Children are responsible, competent, confident and creative users of information and communication technology.
- Computing be presented as a creative and fascinating process in which children are encouraged to use their own initiative, imagination, reasoning and investigative skills.
- Children appreciate the relevance of computing in our society and that they see it as an essential tool for learning, communication, finding information and for controlling and understanding their environment.
- Children receive equal opportunity to develop their computing capability, with the use of computing being planned for, in line with its status as a National Curriculum 2014 core subject.
- Differentiation is planned for in each area of the computing curriculum so that children achieve to the best of their ability.
- Children learn to work individually and collaboratively.

- Children have a heightened interest and awareness of computing through the regular display of their computing enhanced work in the classrooms and around the school, and the positive attitude of staff towards the use of computing.

- Teaching staff are motivated and skilled in the use of computing and aware of the contribution computing can make to teaching and learning.

- Pupils should develop the skills of using computing safely and responsibly in a safe learning environment.

Objectives

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.

Entitlement to the computing curriculum

All children should have access to the use of computing regardless of gender, race, cultural background or physical or sensory disability. Where use of a school computer proves difficult for a child because of a disability, the school will endeavour to provide specialist equipment and software to enable access. Children with learning difficulties can also be given greater access to the whole curriculum through the use of computing. Their motivation can be heightened and they are able to improve the accuracy and presentation of their work. This in turn can raise self-esteem.

Health and Safety

Children should not be responsible for moving heavy equipment around the school. They may load software but should not be given the responsibility of plugging in and switching machines on without a member of staff present.

Food and drink should not be consumed near computing equipment.

It is the responsibility of staff to ensure that classroom computing equipment is stored securely and cleaned regularly.

Staff should ensure that the children are seated at the computers comfortably and be aware of the dangers of continuous use (e.g. eye/wrist strain etc).

An adult should always supervise children when they are accessing information via the Internet. The service provider does filter information but staff are ultimately responsible for information accessed by pupils.

Staff will ensure that pupils adhere to e-safety notices which are displayed around school.

Links to the school development plan

- The computing co-ordinator produces an action plan each year outlining the targets for that year.

- The school has purchased Rising Stars computing scheme of work. Throughout the year the computing co-ordinator will support members of staff in the delivery of this scheme of work.

- The computing co-ordinator will attend training locally and feedback to all staff regarding this.

- An audit of resources will be undertaken yearly to ensure that hardware and software are kept as up to date as possible and that obsolete or broken machines are scrapped or repaired.

Staff training needs will be met by:

- Auditing staff skills and confidence in the use of computing regularly;

- Arranging training for individuals as required;

- The computing co-ordinator should attend courses and support and train staff as far as possible.

Review and evaluation procedures

The everyday use of computing is developing rapidly, with new technology being produced all the time. This policy therefore, will be reviewed and revised on a yearly basis.

Amanda Painter
Computing Co-ordinator

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