

Snettisham Primary School Computing Policy

FGB: 11th July 2017 Review: Summer 2019

Snettisham Primary School Computing Policy

Introduction

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. 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.

Computing should be planned, delivered and assessed on a cross-curricular basis in appropriate contexts and as a tool to enhance and enrich the learning process.

The aims of Computing in the curriculum.

Children are entitled to the opportunity to develop their information and computation capability through activities that arise in all curriculum areas, undertaken individually or in groups, as well as being appropriate to both boys and girls.

Children should use computers and information technology so that they:

- 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
- make informed judgements about ICT applications and their effect on the quality of life for society and the individual

Additionally, by encouraging computing and information technology development through the strands teachers can:

- enable children to become familiar with computing and its related tecnologies in many contexts
- develop children's confidence and satisfaction in the use of computing
- broaden children's understanding of the effects of the use of computing and information technology
- enable children to take greater responsibility for their own learning and provide opportunities for them to decide when it is appropriate to use computing and information technology in their work
- encourage the flexibility needed for children to adjust to and take advantage of future developments in the field of computing.

The objectives for computing and information technology in the curriculum.

In the context of the development of computing and handling information technology, it is envisaged that computing will enhance the process of the teaching and learning in all areas of the curriculum. In particular, children should achieve the following skills and abilities:

- confidence in handling hardware, software and other ICT equipment;
- the ability to use ICT equipment to manipulate and present written word, images and sounds so as to present information convey messages effectively;

- the ability to use a ICT equipment to store information, and retrieve then present it in ways which enhance interpretation and analysis;
- to be able to talk about their use of ICT and its place within real live contexts.
- 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. (See E-Safety Policy)

The Role of the ICT Subject Leader

The designated teacher should:

- ensure the development of a scheme of work for the computing curriculum. This will develop the pre-requisites for the use of computing across the curriculum
- promote the integration of computing within appropriate teaching and learning activities, develop and monitor the contributions of subjects to its cross-curricular use
- manage the provision and deployment of resources and give guidance on classroom organisation and support
- encourage and assist colleagues where required

- act as a contact point between the school and support agencies
- Provide technical expertise network / software / hardware
- Assist with staff training
- Maintain computer systems within the school and main server.

The Role of The Teacher

Even though whole school co-ordination and support is essential to the
development of computing capability, it remains the responsibility of each teacher
to plan appropriate computing activities and assist the subject leader in the
monitoring and recording of pupil progress.

The Organisation of computing

Computing and Information technology is unique within the National Curriculum, as it is the only cross-curricular element with its own attainment target. Although there are times when skills have to be taught as pre-cursor to cross-curricular use, it is not intended that computing will be delivered in isolation. Children's learning experiences in computing across the curriculum must support and reinforce each other. This requires planning for coherence of learning experiences. This ensure available time and resources are utilised efficiently.

Evaluative Assessment

The progress of classes and year groups in ICT is evaluated by the ICT subject leader through:

- monitoring attainment by observation of teaching and learning in the classroom;
- monitoring effectiveness of ICT assessment tasks;
- monitoring progress against the ICT action plan;
- scrutiny of children's work;

Equal Opportunities and the use of Computing and Information Technology

Computers are becoming an everyday fact of life for the children in our schools. It is important, therefore, that all children, girls and boys, those with low attainments and those with high attainments, irrespective of ethnic and social background, feel comfortable with them. However, computers can play an important role in language development, project work, problem solving and investigations. Therefore, it is important that we move away from the image of computers as complicated pieces of technology, towards using them as a resource, which is familiar to each and every child in the class. Familiarity gives confidence, and confidence breeds enjoyment and motivation. This has been demonstrated to be particularly evident for children with special educational needs. Careful planning is necessary to ensure that all children have sufficient time to develop and implement their computer skills. To ensure each child is catered for, the following points should be taken into consideration. Groups should be mixed sex and / or ability wherever possible. Careful monitoring of these groups is necessary to ensure that no one child dominates and that individual skill development is recorded.

All teachers are role models for children. Teachers should be aware of their influence on children and develop their own confidence and competence in the use of the computer.

All policies should be cross referenced with the SEND, Inclusion and Equality Policies which are available on the school website: www.snettisham-primary.co.uk

Resources

Hardware

PC Internet Network

Network Server	
Internet Proxy Server	1
PC 'Tower' stations	29
I-Pads	20
I-Pad Charging Cabinet	1
Printers	1
Wireless Network throughout school.	
Staff laptops	6
Digital Camera	5

$Software \ (\text{See appendix I for further details})$

Microsoft Office (inc. Word, Excel, Powerpoint)
Junior Viewpoint
Revelation Natural Art
Flowol 3
Page Plus 8
Logo/Logotron
Email Detective
Audacity (Freeware sound sampler)
Paint.NET (Freeware art package)
Espresso Coding – for writing computer programs.

EYFS/KS1/2 Computing Appendix I

Hardware and software suggested for use to cover the new curriculum. All year groups need to understand files, opening and saving and where they can be found on the school system. Also it is important that all children know how to shut computers down correctly and realise that the monitor is a separate device to the computer. Continual improvement of keyboard/mouse skills are also vital. The teaching of E-Safety should be taught regularly and children should be reminded of this whenever they use the internet.

Reception
<u>'ear 1</u>
<u>'ear 2</u>
<u>'ear 3</u>
Algorithms and Programs -
Data Retrieving and organising - Internet,
Communicating -

Using the internet - Internet Explore, Google Chrome, MS Word or Powerpoint (for note-making and copy/pasting images or text.

Databases -

Presentation - MS Word and Powerpoint

Year 4

Algorithms and Programs -

Data Retrieving and organising - Internet,

Communicating -

Using the internet - Internet Explore, Google Chrome, MS Word or Powerpoint (for note-making and copy/pasting images or text.

Databases - Microsoft Excel

Presentation - MS Word and Powerpoint

<u>Year 5</u>

In year 5 children need to start understating that there are different file types, (IE Jpeg, BMP, Wav, MP3, doc and files specific to certain software), they should begin to recognise icons and file extensions.

Algorithms and Programs

Data Retrieving and organising - Internet

Communicating

Using the internet - Internet Explore, Google Chrome, different search engines, MS Word or Powerpoint (for note-making and copy/pasting images or text.)

Databases - Microsoft Excel including graphing functions

Presentation - MS Word and Powerpoint

Year 6

In year 6 children need to start understating that there are different file types, (IE Jpeg, BMP, Wav, MP3, doc and files specific to certain software), they should begin to recognise icons and file extensions.

Algorithms and Programs

Data Retrieving and organising - Internet

Communicating

Using the internet - Internet Explore, Google Chrome, different search engines, MS Word or Powerpoint (for note-making and copy/pasting images or text.)

Databases - Microsoft Excel including graphing functions.

Presentation - MS Word and Powerpoint

Snettisham Primary School

Computing and Information Technology Vision Statement

At Snettisham Primary School we aim to provide a rich learning environment, enabling children to reach their full potential through the development of a desire for lifelong learning. We have a clear shared vision of Computing and Information Technology throughout the school where staff, governors, parents and children work together in partnership. We aim to offer a range of high quality, appropriate Computing resources to enhance and enrich teaching and learning across the curriculum, providing equal access to all. We aim to keep pace with educational developments in Computing and ensure that the best possible training and resources are available.

We want the children and staff to become enthusiastic and independent users of technology. We aim to develop the children's Computing skills, knowledge, understanding and capability, and the confidence to share their Computing learning experiences with their parents and carers outside school.

We strive to create an environment where Computing is regarded as an integral part of our everyday practices and administration management, ensuring that staff are competent and confident in the use of Computing.

Appendix III

All computers, including staff laptops, are connected to the main server where there is a large file-storage system and access to the internet. The file-storage system is divided into 2 areas:- *Staff Only* and *Student Files*. The *Staff Only* area is only accessible to staff and contains policy documents, assessment records and shared work. The *Student Files* is accessible to students and staff, it is an area where students save their work and are able to access resources provided by teachers. It is divided into separate folders based on individual classes. Please note the server is backed-up remotely each night in case of file loss or damage.