

# **Computing Policy**

## **Curriculum Statement**

#### Intent

As technology rapidly develops in today's world and becomes an essential part of our society, we ensure our children learn how to access the digital world safely to communicate, play and learn. From Reception through to Year 6, we aim to develop skills within the three main areas of computing- Computer Science, Information Technology and Digital literacy to meet the aim of the National Curriculum.

## <u>Implementation</u>

We implement the intent through the delivery of a high quality of education which places developing the computing concepts throughout the planning of the whole curriculum. Various quality assurance activities are undertaken to rigorously ensure that the implementation of the computing curriculum has maximum impact.

## **Impact**

We aim to ensure that all of Ouston Primary School 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.

# **Teaching and Learning**

## **Early Years Foundation Stage**

Computing is taught in the EYFS as an integral part of one of the seven areas of learning (Understanding the World: Technology). Children have access to various forms of computing throughout the school day.

## **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 program
- 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.

## **Organisation, Planning and Resources**

## **Organisation**

Class teachers are responsible for:-

- Differentiating and adapting lessons to cater for all ability levels, ensuring SEND, greater depth children and EAL (English as an Additional Language) are suitably challenged to meet their needs.
- Incorporating IT, where appropriate, when planning classroom activities.
- Understanding and utilising the range of software available in school and its use in relation to cross-curricular activities.
- Loading and running programs.
- Using computer peripheral devices.
- Recognising and dealing with common faults and mistakes that can arise when using computing hardware and software.
- Maintaining own knowledge and skills of computing in accordance with educational developments.
- Ensuring children are responsible, respectful and safe when using IT.
- Reporting problems or faults to the technician team.

All staff are responsible for Data Protection and have signed the 'Staff ICT Acceptable Use Policy 2017', All computing lessons must have e-safety at the forefront and taught by the Teachers. See planning, 'E-Safety Policy' and 'Pupils E-Safety Agreement.'

## **Planning**

Teachers use Purple Mash to plan their computing lesson and adapted to the needs of their children.

#### **Resources**

Hardware and software resources are reviewed annually. Teachers report any resource shortfalls or maintenance problems to our school's technician team or to the Computing Coordinator. Our main teaching resource is Purple Mash which is used to cover all areas of the curriculum from year 1 to year 6.

#### **Assessment**

Teachers have a whole class computing jotter in which they keep the end of block assessment sheet and examples of children's work to demonstrate a good piece of work from each lesson. These jotters are collected in half-termly for monitoring purposes and subject leader scrutinies. All children are assessed at the end of a block of teaching in line with the whole school assessment policy. Teachers will assess individual pupils as either emerging (Orange highlight), developing (yellow highlight), expected (green highlight) or greater depth (blue highlight) in accordance to the level of work they produce and their contribution within lessons.

## **Equal Opportunities**

All staff within Ouston Primary School and supply staff, must be aware of, and guard against any bias based on gender, racial or any other stereotypes. All pupils should have equal access to Computing.

Our computing curriculum has been planned using national curriculum guidance and in conjunction with LA advice. Our teachers are be encouraged to make cross-curricular links especially in the teaching of IT. However, many aspects of computer science will need to be taught discretely.

## **Inclusion**

All of our children at Ouston Primary School are entitled to a continuous and progressive computing curriculum, which meets their individual needs.

Our SEND pupils have the same computing entitlement as all other pupils and are offered the same curriculum. However, particular application/tools are used for:

- Pupils with learning difficulties need to be motivated to practice basic skills regularly and intensively. They will benefit from the use of programs which practice skills is set in the context of an enjoyable and motivating scenario
  - Pupils with physical disabilities and communication difficulties
  - Pupils of high ability who may be extended through the use of programs which offer challenge and opportunities for investigation.

## **Role of the Subject Leader**

The Computing coordinator is responsible for:-

- Assisting Senior Management with coordinating, developing and implementing the schools policy on Computing.
- Promoting and overseeing staff INSET activities relating to Computing development.
- Developing strategies for the efficient deployment of existing computing resources in the school.
- Consultation with the Head Teacher and staff regarding Computing objectives.
- Keeping abreast of and understanding and current technology, developments and trends relating to Computing and its use in Education by attending network meetings.
- Liaising with and other educational establishments on matters relating to Computing.
- Arranging for the upgrading or replacement of hardware and software as appropriate.
- Completing school action plans and evaluations.
- Updating school policies relating to the teaching of Computing

The Computing Co-ordinator and Senior Management are responsible for the schools compliance with the Data Protection Act.

Louise Lavelle's role is that of Senior Information Risks Officer (SIRO), dealing with management of information and the school's data protection policy.

The Computing coordinator is the schools e-safety officer, responsible for the e-safety policy and delivery of Digital Literacy.

## **Staff Development**

To implement this vision effectively, all staff need to be confident in all areas of the computing curriculum. Staff who have identified areas of development in computing will be identified and through communication between the Computing co-ordinator and the Head teacher, relevant course will be located or training brought into/held at school.

Training will also be offered on new hardware and software purchased. In addition, the Computing co-ordinator and/or other staff will be able to support staff members in using various programmes.

Purple Mash CPD takes place on a yearly basis to update staff on changes and develop their knowledge of the programme.

The Computing Co-ordinator keeps up to date with the latest technological advancements and curriculum developments by attending conferences, network and school cluster meetings. Information is then fed back to the rest of the school during staff meetings.

## **Legislation in Computing**

When appropriate legislation appertaining to the use of IT changes, the Computing Coordinator will discuss this with all members of staff. Software copyright is a serious issue and is taken seriously by Ouston Primary School. Only software which we have purchased the correct user site license will be loaded onto all stations so that staff know it is acceptable to use on all machines.

Legistaltion covering computing in schools includes :-

The Copyright, Designs and Patents Act 1988

The Computer Misuse act 1990

The Data Protection Act 1998

The Freedom of Information Act 2000

The Protection from Harassment Act 1997

The Malicious Communications Act 1988

Section 127 of the Communications Act 2003

Public Order Act 1986

The Defamation Acts of 1952 and 1996

## **Health and Safety**

When working with tools, equipment and materials, in practical activities and in different environments, including those that are unfamiliar, pupils should be taught:

- the appropriate and safe use of all equipment, especially scanners and photocopiers due to the bright lights
  - how to reduce the risk of Repetitive Strain Injury (RSI)
  - The correct and safe way to plug a charging cable into a laptop, Ipad or any other computing equipment.

Wires from computing equipment should be correctly stored to prevent any accidents.

#### Maintenance

Maintenance is carried out by the school's technician team. A member of the team visits school twice a week to give technical support and maintain the network to its optimum capability. In addition, they complete network tasks as and when needed and deal with any other issues arising from use of Computing equipment/software.

The Computing Co-ordinators will decide on whether issues can be dealt using co-ordinator knowledge or by the technician.

# **Working with Parents/Carers**

Information about children's progress with regard to computing is communicated to parents at parents evenings and in their individual annual reports. The teacher assessment sheets are forwarded to the pupil's next teacher.

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