Seaham Trinity Primary School <u>Computing Policy</u>



Document Control

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| Purpose of the document | To ensure that all pupils access to a |
| | computing curriculum that helps them |
| | become responsible, competent, confident |
| | and creative users of information and |
| | communication technology. |
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| Linked documents | Online safety, photographic and video |
| | policy, Data Protection, Anti-Bullying, |
| | Acceptable Use Policies |

1. Curriculum Aims

Our curriculum 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.

Early Years and 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 free access to various forms of IT 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 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.

2. Entitlement

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

The computing curriculum has been planned using national curriculum guidance and in conjunction with LA advice. Teachers will 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.

3. Special Needs and Inclusion

Pupils with special educational needs 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.

4. Equal Opportunities

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.

5. Assessment and Monitoring

The system of levels and level descriptors has now been removed. A set of computing assessment grids have been developed with guidance from the LA and covers all areas of the computing curriculum. The grids include the National Curriculum statements and descriptors for emerging, developing, secure and working at greater depth. Staff will group their class into ability group groups (higher ability, middle ability and lower ability) and will fill in one assessment grid for the relevant age for each group. This will be updated termly for planning purposes and at end of the year each pupil will be measured against national expectations. This assessment information will be handed to the next teacher the following year.

6. Reporting

Information about children's progress with regard to computing is communicated to parents at parents' evenings and in their individual annual reports.

7. Resources

Hardware and software resources are reviewed annually. Teachers report any resource shortfalls or possible extension requirements to the computing co coordinator or IT Technician.

8. Responsibilities

Class teachers are responsible for:-

- Differentiating and adapting lessons to cater for all ability levels, ensuring SEN (Special Educational Needs), MAT (More Able and Talented) 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 ICTSS.

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 Durham County staff and other educational establishments on matters relating to Computing.
- Arranging for the upgrading or replacement of hardware and software as appropriate.
- Organising/managing the duties of the school technician regularly.
- Completing school action plans and evaluations.
- Updating school policies relating to the teaching of Computing

The Computing Co-ordinator is not responsible for the schools compliance with the Data Protection Act and part of the role is that of Senior Information Risk Officer (SIRO), dealing with management of information and the schools data protection policy.

All staff are responsible for protecting the data they use as part of their job.

The Computing Co-coordinator is not the schools e-safety officer, responsible for the e-safety policy and delivery of Digital Literacy.

9. Maintenance

Maintenance is carried out by the school's technician who visits the school once a week to give technical support and maintain the network to its optimum capability. In addition, he completes network tasks as designated by the Computing Co-ordinator and IT Apprentice. The Computing Co-ordinators will decide on whether issues can be dealt with using coordinator or apprentice knowledge or by the technician.

10. 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:

To <u>never</u> look into the projector lens

• The appropriate and safe use of all equipment, especially scanners and photocopiers due to the bright lights.

11. 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 Headteacher, 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.

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.

The school also has policies on:-

- Online-safety
- Photographic and video policy
- Data Protection
- Anti Bullying
- Acceptable use Policies

12. Home/ School Links

To foster these links, the school has set up its own website to promote the school, showcase the children's work and inform the parents of termly dates etc. In addition, the Durham Learning Gateway should be used by staff and pupils to enhance learning at both home and school.

The school posts newsletters on the school website and also e-mails them to parents who have requested this facility.

For important notices, parents are updated via SMS using a school mobile phone (See Online-Safety Policy) and the privacy notice.

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