Computing Policy



Hillborough Infant and Nursery School

Owned and Written by:	Date:	
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Approved by:	Date:	
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In consultation with:		
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This policy has been updated to reflect the General Data Protection Regulation		

(GDPR) and Data Protection Act 2018, and it supersedes the HM Government Information Sharing Guidance for Practitioners and Managers published in March 2015.

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1. Introduction

The use of information and communication technology is an integral part of the National Curriculum and is a key skill for everyday life. Chrome books, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Hillborough Infant and Nursery School, we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively. The purpose of this policy is to state how the school intends to make this provision.

2. Aims

The school's aims are to:

- Meet the requirements of the National Curriculum programmes of study for computing.
- Provide a relevant, challenging and enjoyable curriculum for computing for all pupils.
- Use ICT and computing as a tool to enhance learning throughout the curriculum.
- To respond to new developments in technology.
- To equip pupils with the confidence and capability to use ICT and computing throughout their later life.
- To develop the understanding of how to use ICT and computing safely and responsibly.

The National Curriculum for computing aims to ensure that all pupils:

- 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.

In School we have split the Computing Curriculum into 4 areas:

Using and Understanding Technology in the Real World:

Throughout their time in primary education, pupils need to extend that understanding to include computer networks such as the Internet, and the services they can provide such as the World Wide Web. Teachers need to provide practical, fun experiences that allow pupils to make links with their existing understanding of the world around them. In doing so, pupils will ultimately become much more effective creators and users of digital content.

• Computational Thinking and Programming:

Computational thinking is about looking at a problem in a way in which a computer can help us to solve it. This is a two-step process; first, we think about the steps needed to solve a problem, then, we use our technical skills to get the computer working on the problem.

Computer Science is more than programming, but programming is an absolutely central process for Computer Science. It covers two distinct, but related, aspects - the ideas and principles that underpin how digital technology works, sits alongside the practical experience of programming, almost certainly the best way for primary pupils to learn about computer science. Programming encourages creativity, logical thought, precision and problem-solving, and helps foster the personal, learning and thinking skills required in the school curriculum.

Digital Literacy:

Pupils in our school need to be creators and develop confidence, competence and independence to tinker and experiment when using familiar and unfamiliar technologies. They need to have the opportunity to design and create, edit, manipulate, collect, analyse, evaluate and present data and information on a wide range of technology, across a wide range of media including text, images, sound, animation, video and 3D, VR and AR, in a wide variety of contexts to express their own insights and ideas. The internet makes it easy for pupils to work collaboratively online in real-time and can share their work with others for review and comments, just as they have always been able to do in class. Pupils need to work with numerical data and experience working with both small and large datasets, some of which can be generated by them or wider across the curriculum.

Online Safety and Digital Literacy

Pupils explore how online information is found, viewed and interpreted. They learn how personal online information can be used, stored, processed and shared as well as explore the concept of ownership of online content.

3. Resources

We have a computer suite of 15 Chrome books and one iPad trolley containing 30 iPads. These are timetabled for use by all children. Computers around the school are networked and have Internet access with some exceptions. We keep resources for ICT and computing in a central store. Interactive Whiteboards are available for all children to access daily. The computing suite is available for use throughout the school day as part of computing lessons as well as for cross-curricular use and extracurricular computing club.

4. Online resources for home use

Online resources for home use in recent years there has been a boom in the education opportunities that are available online. We have bought into the following to give pupils safe access to online education opportunities outside of school. These are:

- Purple Mash
- J2E
- Oxford Owl
- Busy Things

Pupils have passwords that can be used to access these sites. Pupils have been shown how to use them and how to keep their passwords safe from others.

5. Monitoring

The monitoring of the standards of the children's work and of the quality of teaching in computing is the responsibility of the computing subject leader. This is carried out through the monitoring of planning and the learning walks. The computing subject leader is also responsible for supporting colleagues in the teaching of computing, for keeping informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school.

6. Review Period

This policy will be reviewed every two years by our Computing Lead.