Computing and E-Safety Policy Updated: September 2021 Review: September 2022

#### Introduction

The use of computing is an integral part of the National Curriculum and is a key skill for everyday life. It has a critical role in enhancing and supporting the learning process at all levels. 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.

#### Rationale

Computing is concerned with the storage, processing, presentation and communication 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 todays modern lifestyle, it is essential that all pupils are given immediate access to a rich source of materials. They should have the confidence and ability to present information in new ways that helps pupils understand access and use it more readily. This will prepare them for the challenge of a rapidly developing and changing technological world. Computing can motivate and enthuse pupils, therefore offering flexibility to meet individual needs and abilities. Computing can enhance and extend children's abilities to focus and concentrate as well as offer the potential for effective group working.

#### Aims

Our school aims to:

- Provide a relevant, challenging and enjoyable curriculum for computing for all pupils.
- Mett the requirements of the national curriculum programmes of study for computing.
- Use 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 computing throughout their later life.
- To enhance learning in other areas of the curriculum using computing.

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- To develop the understanding of how to use computing safely and responsibly.
- Present computing as a creative and fascinating process in which children are to be encouraged to use their own initiate, imagination, reasoning and investigative skills.
- Show children how to appreciate the relevance of computing in our society and to see it as an essential tool for learning, communication, finding information and for controlling and understanding their environment.

### Objectives

The National Curriculum for Computing 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.

In the Foundation Stage, it is important to give children a broad, play-based experience of computing in a range of contexts, including outdoor play. Computing is not just about computers. Early years learning environments should feature computing scenarios based on experience in the real world, such as role play. Children gain confidence, control and language skills through opportunities to "paint" on the whiteboard or programme a toy. Recording devices can support children to develop their communication skills. This is particularly useful with children who have English as an additional language.

By the end of 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.

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- 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.

#### Assessment, Recording and Reporting

- Yearly planners will be used to ensure all areas of computing are covered each year.
- Evidence of pupils work will be kept in individual topic books or folders.
- A class list is kept to ensure each child has had the experience set out in the scheme of work.
- Reports to parents include each child's progress in computing.

#### Planning

A scheme of work will be planned in line with the National Curriculum and will allow for clear progression throughout the school. Modules will be designed to enable pupils to achieve stated objectives. Pupil's progress towards these objectives will be recorded by the teacher as explained under Assessment, Recording and Reporting. Staff will follow medium term plans with objectives set out in the National Curriculum. We recognise that all classes have children with widely differing computing abilities. This is especially true when some children have access to equipment at home, while others do not. Teachers will take account of these requirements and plan, where necessary to support individuals or groups of pupils to enable them to participate effectively in the curriculum.

#### Resources

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible system by investing in resources that will effectively deliver the strands of the national curriculum and support the use of computing across the school.

Every classroom has a laptop connected to the school network and an interactive whiteboard with audio, DVD, video and Apple TV facilities. These can be linked up via projectors and visualisers for class work.

All classes have three PCs that are linked to a class or shared printer, and have wireless internet access for use with laptops, PCs and Chromebooks.

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Programmable floor robots are provided for each year group, with the aim of six robots in each class to ensure coverage of the programming strand of the curriculum.

Every class has an iPad, connected to the wireless internet and with an option to connect to the interactive whiteboard via Apple TV for sharing classwork. These iPads are currently being used as a method to take photos and videos to document the children's learning.

The school has recently invested in sixteen Chromebooks, which are connected to the wireless internet and come with individual headphones. Each class has been timetabled in to have use of these Chromebooks across the week to ensure that the curriculum can be met and implemented in a cross-curricular approach.

A sever is located in the office to enable all work to be backed up and staff resources and planning kept secure. It enables all PCs in class to be accessed by the teacher so that pupils work can be shared on the interactive whiteboard.

Teachers are required to inform the technician of any faults as soon as they are noticed.

### Internet

Children will be supervised at all times when using the internet.

Specific sites will be used wherever possible.

Filtering system is in place to allow safe surfing when online.

In the event f unsuitable material being accessed the adult supervising will immediately place themselves in front of the screen and revert to the homepage. The computing coordinator and the Head Teacher should be informed and the computing co-ordinator will inform the providers. Children are also reminded to tell an adult if something worries or upsets them when online.

### Health and Safety

The school is aware of the health and safety issues involved in children's use of computing. All fixed and portable electrical appliances in school are inspected annually. All staff should visually check electrical equipment before they use it. Any faults or

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damaged equipment will result in the equipment being withdrawn from use. Damaged equipment should be reported to the technician or subject co-ordinator who will arrange for repair or disposal.

Teachers should be aware of the potential dangers from trailing leads and cables and ensure they are made safe by placing behind equipment. Children should not put plugs into sockets or switch the sockets on. Liquids must not be taken near the computing equipment. Children will be informed of the rules when using electrical equipment and know the importance of informing the teacher if any suspected fault in the equipment is found.

To ensure health and safety, pupils must be encouraged to sit up straight on correct height chairs. They must not be seated too closely to the screens, have the mouse mat correctly positioned and time at the computer should be rationed to 20 minutes.

### Equal Opportunities

We will ensure that all children are provided with the same learning opportunities and chance to develop their potential regardless of gender, race, cultural background, social class or physical or sensory disability. Resources for children with learning difficulties can also be given greater access to the whole curriculum through the use of computing. Their motivation can be heightened which can enable them to improve accuracy and presentation of their work. Resources will be made available to support and challenge children appropriately.

### E-Safety

Computing is used increasingly across the curriculum to enhance and extend learning but it is essential that e-safety is an integral part of the delivery and use of computing equipment. E-safety is therefore embedded within the curriculum as follows:

- E-safety rules are introduced to the children at the start of each academic year
- E-safety rules are re-visited on a regular basis within a range of curriculum areas including Personal, Social Health Education (PSHE).
- A set of internet rules are included for display in the classroom explaining how the children use the internet in school.

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• Pupils are encouraged to tell a teacher immediately if they encounter any material that makes them feel uncomfortable.

Rules for Mobile Technologies

- Staff are allowed to bring in personal mobile phones and devices for their own use. Members of staff should not contact a pupil or parent/carer using their personal device. The wearing of any camera/videoing device is prohibited in school.
- Social Networking Social networking sites such as Facebook and Instagram will be blocked to keep pupils safe and our systems secure.

E-safety complaints

- Complaints of internet misuse will be dealt with by the Head Teacher and recorded in the Incident Log.
- Any complaint about staff misuse will be reported to the Head Teacher.
- Complaints of a Child Protection nature must be reported to the named Designated Safeguarding Leads.

Parental/Carer Involvement Parents and Carers should be kept fully informed of esafety education via a variety of mediums:

- E-safety policy is available via the school website and school office.
- E-safety policy is reiterated via newsletters and school website.
- E-safety leaflets, DVDs and other publications are distributed to parents/carers.

### Responsibilities

Role of the Head teacher:

- Monitor implementation of Computing and quality of teaching in classrooms.
- To keep the governing body informed and manage budget to allow sufficient funding for computing equipment and staff development.
- To liaise with the co-ordinator.

Role of the Computing Subject Co-ordinator/Subject Leader:

• To be enthusiastic about Computing and demonstrate good practice.

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- To be responsible for monitoring the standard of children's work and the quality of teaching.
- To keep up-to-date by attending courses, giving feedback and deliver training where necessary.
- To provide guidance and support to colleagues in implementing computing skills and scheme of work and to monitor through classroom observations.
- To organise resources, and liaise with the computing technician in maintaining equipment.

### Other Subject Leaders

- Are responsible for development of Computing in their subject area.
- Policies and scheme of wok will identify computing software to use to develop specific skills.
- They will keep other staff informed of developments.

### **Class Teachers**

• Should ensure that pupils in class have opportunities for learning computing skills and use computing across the curriculum as set out in the scheme of work.

### Teaching Assistants

• Should be given opportunities to increase personal knowledge and have in school training of applications they are likely to assist pupils with.

### Children

• Should be taught to become independent users of computing at their appropriate level and be encouraged to question their actions, respect the equipment and follow the E-Safety rules.