



The Orchard Vision: *Inspiring Success*
Values: *Determination, Courage, Respect*

The Orchard Computing Policy 2021

Introduction

The use of information and communication technology is an integral part of the national curriculum and is a key skill for everyday life. Computers, tablets, 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 The Orchard 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.

Aims

- Provide a relevant, challenging and enjoyable curriculum for Computing for all pupils.
- Meet the requirements of the national curriculum programmes of study for computing.
- Use computing as a tool to enhance learning throughout the curriculum.
- 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.
- To develop the understanding of how to use computing safely and responsibly.

The National Curriculum Computing Aims

The new national curriculum for computing aims to ensure that all pupils:

- Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication.
- 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.

At The Orchard children are required to achieve these aims by covering the subject content from the National Curriculum.

Rationale

The Orchard School believes that computing •

- Gives pupils immediate access to a rich source of materials.
- Can present information in new ways which help pupils understand, access and use it more readily.
- Can motivate and enthuse pupils.

- Can help pupils focus and concentrate.
- Offers potential for effective group working.
- Has the flexibility to meet the individual needs and abilities of each pupil.

Objectives

Early Years

Whilst technology is no longer a separate Early Learning Goal computing still occurs in Reception. It is important in the Early Years 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 in role play. Children gain confidence, control and language skills through opportunities to 'paint' on the whiteboard or program 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.

Key Stage 1

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 a sequence of instructions.
- Write and test simple programs.
- Use logical reasoning to predict and computing the behaviour of simple programs.
- Organise, store, manipulate and retrieve data in a range of digital formats.
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

Resources

At The Orchard we have a range of hardware for the children to use. These include 30 laptops (5 per class or 15 per year group so they can be used with a whole class) and smartboards in every classroom. Children have access to these during the school day in small groups or in whole class settings. These are in addition to cameras, printers, Dictaphones and other hardware. The pupils and staff also have access to a range of software to support in class, clicker7, phonics play, espresso etc. The use and relevance of these will be monitored over an academic year to assess which has been most effective and whether any additional software is needed.

Health and safety (see also health and safety policy)

The Orchard School is aware of the health and safety issues involved in children's use of ICT and computing. •

- All portable electrical equipment in school is tested by an external contractor every twelve months.
- It is advised that staff should not bring their own electrical equipment in to school but if this is necessary, then the equipment must be PAT tested before being used in school.
- Damaged equipment should be reported to the technician or business manager who will arrange for repair or disposal.
- Children should not put plugs into sockets or switch the sockets on
- Trailing leads should be made safe behind the equipment
- Liquids must not be taken near the computers
- E-safety forms an integral part of the curriculum and the school will deliver further education through assemblies termly and parent presentations biennially.

Security •

- The ICT and computing technician /coordinator will be responsible for regularly updating anti-virus software.
- Use of ICT and computing will be in line with the school's 'acceptable use policy'.
- All staff, volunteers and children must sign a copy of the schools AUP.
- Parents will be made aware of the 'acceptable use policy' at school
- All pupils will be aware of the school rules for responsible use on login to the network and will understand the consequence of any misuse.
- The agreed rules for safe and responsible use of ICT and computing and the internet will be displayed in all ICT and computing areas.

September 2021