Rode Heath Primary School

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Headteacher: Mr J. Frankland

Policy for ICT and Computing



Proposed on		
Ratified on		
Date for review		
	Name	Signed
Headteacher		
Chair of Governors		

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 Rode Heath Primary 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.

This policy will operate in conjunction with other important policies in our school, including our Mobile Phone, Digital Device and Social Media Policy, Behaviour Anti-Bullying and Child-on-Child Abuse Prevention Policy, Data Protection Act 2018, UK General Data Protection Regulation (UK GDPR), RHPS Child Protection and Safeguarding Policy, ICT and Computing Policy, Education for a Connected World, Teaching online safety in school, Sharing nudes and semi-nudes: advice for education settings working with children and young people, Harmful online challenges and online hoaxes, Health and Safety Policy, Equality and Diversity Policy, Complaints Policy and Statutory guidance for schools and colleges - 'Keeping children safe in education' DfE September 2023.

Aims

- Provide a relevant, challenging and enjoyable curriculum for ICT and computing for all pupils.
- Meet the requirements of the National Curriculum programmes of study for ICT and computing.
- 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 enhance learning in other areas of the curriculum using ICT and computing.
- 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:

- 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.

Rationale

The school believes that ICT and 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 (Non-Statutory)

It is important in the Foundation Stage to give children a broad, play-based experience of ICT in a range of contexts, including outdoor play. ICT is not just about computers. Early years learning environments should feature ICT 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 interactive whiteboard or programme a toy. Recording devices can support children to develop their communication skills. This is particular 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.
- Create and debug simple programs.
- Use logical reasoning to predict and computing 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

By the end of Key Stage 2 pupils should be taught to:

- Design and write 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 a simple algorithm works 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 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.

Resources and access

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible pc system by investing in resources that will effectively deliver the strands of the national curriculum and support the use of ICT and computing across the school. Teachers are required to inform the computing leader and IT support of any faults as soon as they are noticed. ICT and computing network infrastructure and equipment has been sited so that:

 All classrooms have a laptop, a whiteboard and interactive pen, Apple AirPlay in Years 1 to 6 and shared spaces, sound equipment in each classroom, and DVD facilities.

- There are two interactive touch screen monitors in KS1 and one in the meeting room.
- There are a total of 74 iPads and 2 laptop trolleys (32 laptops).
- The computers and iPads are available for use throughout the school day as part of ICT and computing lessons and for cross curricular use.
- Pupils may use ICT and computing tools independently, in pairs, alongside a TA or in a group with a teacher.
- The school has an ICT and computing technician who is in school one afternoon each week.
- Raspberry Pi, Lego WeDo, Crumble, BeeBot, micro:bit, drones, 3D printers x2, Codebugs and a Sphero.

Code Club

There is a weekly after school Code Club for KS2 where children complete programming tasks. This provides an excellent opportunity for children to continue extra-curricular ICT/Computing activities and to develop mentoring skills.

Planning/Assessment

Modules are planned in line with the national curriculum and will allow for clear progression. The computing curriculum includes year group lessons with resources and composite tasks. Pupil progress towards these objectives will be recorded by teachers as part of their class recording system and finally added to a spreadsheet.

Inclusion

At Rode Heath Primary we plan to provide for all pupils to achieve, including boys and girls, more able and talented pupils, those with Special Educational Needs or Disabilities (SEND), from all social and cultural backgrounds, pupils with entitlement to Pupil Premium funding, children who are in care and those subject to safeguarding, pupils from different ethnic groups and those from diverse linguistic backgrounds or with English as an additional language (EAL.)

Health and safety

The school is aware of the health and safety issues involved in children's use of ICT. All electrical appliances in school are tested accordingly. 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. This also applies to any equipment brought in to school by, for example, people running workshops, activities, etc. and it is the responsibility of the member of staff organising the workshop etc. to advise those people. All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the ICT Technician or Headteacher

who will arrange for repair or disposal. This information should also be recorded in the health and safety risk assessment document.

Security

- The ICT and computing technicians will be responsible for regularly updating anti-virus software and ensuring internet filters are in place.
- All pupils and parents will be aware of the school rules for responsible use of ICT and computing and the internet and will understand the consequence of any misuse. This is a signed agreement in the child's reading diary.