Computing Policy

Beresford Memorial CE
First School

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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 Beresford Memorial First 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.

Purpose

This policy reflects the values and philosophy in relation to the teaching and learning of and with ICT. It sets out a framework within which teaching and non-teaching staff can operate and give guidance on planning, teaching and assessment. This policy should be read in conjunction with the scheme of learning for Computing that sets out in detail what children in different year groups will be taught and how ICT can facilitate or enhance learning in other curriculum areas

Aims

The Computing in the National Curriculum (2013) expectations split the teaching and learning of Computing into three strands (Computer Science, Digital Literacy and Information Technology). It is therefore important that children recognise the difference between what makes each one relevant to their future, as well as their everyday lives. High quality teaching of Computing, from Reception through to Year 4, utilises a combination of practical lessons and theory lessons designed to promote discussion and nurture understanding, which are also relevant to other areas of the curriculum..

Computer Science

• To enable children to become confident coders on a range of devices.
• To create opportunities for collaborative and independent learning
• To develop children's understanding of technology and how it is constantly evolving.

Digital Literacy

• To enable a safe computing environment through appropriate computing behaviours.
• To allow children to explore a range of digital devices.
• To promote pupils' spiritual, moral, social and cultural development.

Information Technology

• To develop ICT as a cross-curricular tool for learning and progression.
• To promote learning through the development of thinking skills.
• To enable children to understand and appreciate their place in the modern world.

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Legal framework

This policy has due regard to all relevant legislation and statutory guidance including, but not limited to:

DfE (2013) 'Computing programmes of study: key stages 1 and 2'

Roles and responsibilities

The headteacher in consultation with the ICT leader and staff will:

• Determine the ways in which Computing and ICT supports, enriches and extends the curriculum.

• Decide on the provision and allocation of resources.

• Ensure that Computing and ICT is used in a way that achieves the aims and objectives of the school.

The ICT leader will oversee the planning and delivery of Computing and ICT within the school through:

Facilitating the use of ICT across the curriculum in collaboration with all subject leaders.
Providing or organizing training to keep staff skills and knowledge up to date.
Advising colleagues about effective teaching strategies, managing equipment and purchasing resources.
Monitoring the delivery of the Computing and ICT curriculum and reporting to the head teacher and governors.

Ensuring all National Curriculum statutory requirements are being met with regard to the use of ICT within curriculum subjects.

Whole school coordination and support is essential to the development of Computing and ICT capability however, it is the responsibility of each **individual teacher** to plan and teach appropriate Computing and ICT activities and assist the leader in the monitoring and recording of pupil progress in the subjects.

EYFS

Although computing is not a statutory part of the EYFS, we will ensure that children of reception age receive a broad, play-based experience of computing through the use of new technologies.

KS1

Pupils will be taught to:

Understand what algorithms are, and how they are implemented.

Create and debug simple programs.

Predict the behaviour of simple programs.

Create, organise, store, manipulate and retrieve digital content.

Recognise common uses of ICT beyond school.

Use technology safely and respectfully, keeping personal information private, and to identify where to go for help and support when they have concerns online.

KS2

Pupils will be taught to:

Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems, and solving problems.

Use sequence, selection, and repetition in programs.

Work with variables and various forms of input and output.

Explain how some simple algorithms work, and how they can detect and correct errors.

Understand computer networks, how they can provide multiple services, and the opportunities they offer for communication and collaboration.

Use search technologies, understand how results are selected and ranked, and be able to critically evaluate digital content.

Select, use and combine a variety of software on a range of devices to design and create programs, systems and content that accomplish specific goals.

Use technology safely, respectfully and responsibly, recognise acceptable behaviour and identify a range of ways to report online concerns.

Curriculum delivery

(See Documents: Computing - Beresford Planning/ Computing Progression Map)

The core requirements of the KS1 and KS2 computing programmes of study, such as coding/programming, will be delivered through the Beresford Planning Document/ Computing Progression Map.

Teacher's planning is differentiated to meet the range of needs in each class. A wide range of teaching and learning styles are employed to ensure all children are sufficiently challenged. Children may be required to work individually, in pairs or in small groups

according to the nature of the task. Different outcomes may be expected depending on the ability and needs of the individual child.

An audit of resources is taken on an annual basis to ensure that our computing provision remains appropriate to the latest requirements of the KS1 and KS2 primary computing programmes of study.

Web filters are kept up-to-date in order to ensure that pupils don't access inappropriate materials.

Obsolete or broken machines are repaired or, where repair is not possible or cost-effective, scrapped in accordance with data protection requirements.

Differentiation

- We provide suitable learning opportunities for all pupils by matching the challenge of the task to the individual needs and abilities of each pupil. We will achieve this in a variety of ways, including:

- Grouping pupils by ability and setting different tasks for each ability group.
- Assigning teaching assistants to individual/groups of pupils, where appropriate, to enable greater one-to-one support.
- More able pupils may be asked to mentor and share their skills with others, during computer lessons

Assessment

We assess the children's work in Computing whilst observing them working during lessons. Teachers record the progress made by children against the lesson objective- using the marking codes set out in our Feedback and Marking Policy. In doing so, this highlights implications for future teaching and informs future planning within the subject.

Once the children complete a unit of work, we make a summary judgement of the work for each pupil as to whether they have yet to achieve, achieved or exceeded the expectations of the unit. We record the results in our assessment files and we use these to plan future work. ICT and computing work is saved on the school network. Samples of work will be kept for groups of children, stored in both classrooms and on the school network, within relevant class and pupil folders.

Staff training

The ICT coordinator will assess and address staff training needs as part of the annual development plan process or in response to individual needs and requests throughout the year.

Individual teachers should attempt to continually develop their own skills and knowledge, identify their own needs and notify the coordinator.

Teachers will be encouraged to use ICT and computing to produce plans, reports, communications and teaching resources.

Monitoring and evaluation

We appreciate that computers and ICT are rapidly developing, with new uses and technology being created all the time.

We will review this policy on an **annual** basis in line with our policy review schedule.

We will review our web filters on an **annual** basis in order to ensure that pupils continue to be protected from inappropriate content online

Signed by:

Mrs C Quinn   Headteacher   Date:

Mrs K Burmeister   Chair of Governors   Date: