Enrich Enjoy Excel

EASTRINGTON PRIMARY SCHOOL

COMPUTING POLICY

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Headteacher: Heidi Gallagher

Chair of Governors: Alvin Fernandes

Subject Coordinator: Mrs Rachael Kay

Eastrington Primary School

Computing Policy

Purpose

This policy reflects the school values and philosophy in relation to the teaching and learning of Computing. It sets out a framework within which teaching and non-teaching staff can operate and gives guidance on planning, teaching and assessment. The policy should be read in conjunction with the Remote Learning Policy, the Online Safety Policy, knowledge of Education for a Connected World Guidance and in conjunction with our long term plans and progressions ladders which set out in detail the objectives of which pupils in different classes and year groups will be taught. Our scheme of work for Computing is 'Teach Computing', this scheme can be accessed at https://teachcomputing.org/ and found in folder - Staff Shared/Subject Coordinator File/ Computing/Teach Computing and is supported by resources provided by ILEARN2 https://www.ilearn2.co.uk/.

This policy is intended for:

- All teaching staff
- Teaching Assistants
- School governors
- Parents
- Inspection teams

Introduction

Computing aims to prepare pupils to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technology. We recognise that computing is an important tool in both the society we live in and in the process of teaching and learning. Pupils use different tools to find, explore, analyse, exchange and present information responsibly and creatively. They learn how to employ computing to enable rapid access to ideas and experiences from a wide range of sources. Our vision is for all teachers and learners in our school to become confident users of ICT so that they can develop the skills, knowledge and understanding which enables them to use the appropriate resources effectively as powerful tools for teaching & learning, for example Beebots, iPads, tablets etc.

Computing Provision and Planning

The main focuses of the new curriculum involve planning for:

- Computer Science (CS);
- Information technology (IT);
- Digital Literacy (DL).

It is important in the Foundation Stage to give children a broad, play-based experience of 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 drive a remote-controlled toy. Outdoor exploration is an important aspect, supported by Computing toys such as controllable traffic lights and walkie-talkie sets. Recording devices can support children to develop their communication skills.

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
- 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

Pupils should be taught to:

- design, write and debug 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 some simple algorithms work 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 design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- use technology safely, respectfully and responsibly; recognize acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

The Teach Computing Scheme of Work is to be used to form the medium term plan and short term plans for computing on which are: Learning objectives, activities (differentiated), vocabulary and assessment. Adaptations are made to ensure the plan is progressive in developing pupil capability. Each class is allocated a time in the Computing suite or to have use of the laptop trolleys to enable them to follow this scheme of work. Additional time is taken for pupils to be given the opportunity to apply and enhance the use of computing skills during other subject time.

Aims

- To enable children to become autonomous, independent users of computing, gaining confidence and enjoyment from their activities
- To develop a whole school approach to computing ensuring continuity and progression in all strands of the computing National Curriculum
- To use computing as a tool to support teaching, learning and management across all areas of the curriculum
- To provide children with opportunities to develop their computing capabilities in all areas specified by the curriculum.
- To ensure Computing is used, when appropriate, to improve access to learning for pupils with a diverse range of individual needs, including those with SEN and disabilities
- To maximise the use of computing in developing and maintaining links between other schools, the local community including parents and other agencies
- To maximise the use of online platforms and APP's such as Spelling Shed, Seesaw, Timestable Rockstars for use in school and at home

Objectives

In order to fulfil the above aims it is necessary for us to ensure:

- a continuity of experience throughout the school both within and among year groups
- the systematic progression through EYFS and Key Stages 1 & 2
- that the National Curriculum programmes of study and their associated strands, level descriptions and attainment target are given appropriate coverage – mainly through the use of the Teach Computing Scheme of Work.
- that computing experiences are focused to enhance learning
- that cross curricular links are exploited where appropriate
- that children's experiences are monitored and evaluated
- that resources are used to their full extent
- that resources and equipment are kept up to date as much as possible
- that staff skills and knowledge are kept up to date

Teaching & Learning

Teacher's planning is differentiated to meet the range of needs in any class including those children who may need extra support, those who are in line with average expectations and those working above average expectations for children of their age.

A wide range of 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 or activity of the task.
- Different pace of working
- Different groupings of children - groupings may be based on ability, either same ability or mixed ability.
- Different levels of input and support

Equal Opportunities

It is our policy to ensure that we meet equal opportunities by:

- ensuring all children are given the opportunity to follow the scheme of work
- keeping a record of children's work to ensure equal access and fairness of distribution of Computing resources
- providing curriculum materials and software which are in no way class, gender or racially prejudice or biased

Assessment

Computing is assessed both formatively and summatively. Formative and summative assessment occurs on a lesson by lesson basis based on the lesson objectives and outcomes. These are conducted informally by the class teacher and are used to inform future planning.

Inclusion

We recognise computing offers particular opportunities for pupils with special educational needs and gifted and/or talented children and /or children with English as an additional language for example. Computing can cater for the variety of learning styles which a class of children may possess.

Using computing can:

- increase access to the curriculum
- raise levels of motivation and self esteem
- improve the accuracy and presentation of work
- address individual needs

We aim to maximise the use and benefits of ICT as one of many resources to enable all pupils to achieve their full potential. If the situation arises, the school will endeavour to provide appropriate resources to suit the specific needs of individual or groups of children.

Senior Management

The overall responsibility for the use of ICT rests with the senior management of a school.

The Head, in consultation with staff:

- determines the ways computing should support, enrich and extend the curriculum
- decides the provision and allocation of resources
- decides ways in which developments can be assessed, and records maintained
- ensures that ICT is used in a way to achieve the aims and objectives of the school
- ensures that there is an computing policy, and identifies a computing co-ordinator

Computing Coordinators

There is a designated computing Co-ordinator (Mrs Rachael Kay) to oversee the planning and delivery of computing within the school. The coordinator will be responsible for

- raising standards in computing as a national curriculum subject
- report and work alongside IT for Schools Support team to maintain the function of all devices

- facilitating the use of ICT across the curriculum in collaboration with all subject coordinators
- providing or organising training to keep staff skills and knowledge up to date
- managing equipment and purchasing resources with the support of the Local Authority Computing Support team.
- monitoring the delivery of the computing curriculum and reporting to the Headteacher on the current status of the subject

The Subject Coordinator

There is a clear distinction between teaching and learning in computing and teaching and learning with computing. Subject coordinators should identify where Computing should be used in their subject schemes of work. This might involve the use of short dedicated programs that support specific learning objectives or involve children using a specific application which they have been taught how to use as part of their computing study and are applying those skills within the context of another curriculum subject.

The Classroom Teacher

Even though whole school co-ordination and support is essential to the development of computing capability, it remains the responsibility of each teacher to plan and teach appropriate Computing activities and assist the co-ordinator in the monitoring and recording of pupil progress in computing.

Monitoring

Monitoring computing will enable the coordinator to gain a good overview of the teaching and learning throughout the school. This will assist the school in the self-evaluation process identifying areas of strength as well as those for development. The coordinator will:

- Review plans to ensure full coverage of the computing curriculum requirements
- Analyse children's work
- Hold discussions with teachers
- Observe the child at work
- Question the child
- Small group/individual discussion with the teacher in the context of a task.

Health & Safety

We will operate all Computing equipment in compliance with Health & Safety requirements. Children will also be made aware of the correct way to sit when using the computer and the need to take regular breaks if they are to spend any length of time on computers.

Effective and efficient deployment of Computing resources

Computing resources are deployed throughout the school to maximise access, to enhance teaching & learning and to raise attainment. To enable regular and whole class teaching of computing the school has an Computing suite and portable laptop charging trolleys which all classes in key stages 1 & 2 use for approximately 1 hour per week to develop their Computing skills. Children also have access to a set of IPads. All classrooms, including the Computing room, have a television screen or interactive whiteboard which are fully operational.