

Computing Policy

Introduction

The use of computer systems is an integral part of the National Curriculum and knowing how they work is a key life skill. In an increasingly digital world there now exists a wealth of software, tools and technologies that can be used to communicate, collaborate, express ideas and create digital content. We recognise that pupils are entitled to a broad and balanced computing education with a structured, progressive, approach to the learning how computer systems work, the use of IT and the skills necessary to become digitally literate and participate fully in the modern world.

Aims:

Grasslot School aims to:

- Provide a broad, balanced, challenging and enjoyable curriculum for all pupils.
- Develop pupil's computational thinking skills
- Meet the requirements of the national curriculum for computing at Key Stage 1 and develop computational thinking throughout Early Years Foundation Stage.
- Respond to new developments in technology.
- Equip pupils with the confidence and skills to use digital tools and technologies
- Enhance and enrich learning in other areas of the curriculum using IT and computing.
- Develop the understanding of how to use computers and digital tools safely and responsibly.

Objectives

Early Years Foundation Stage

Priority is given to providing children with a broad, play-based experience of IT in a range of contexts, including outdoor play. The early years learning environment features IT scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to create artwork using digital drawing tools and control programmable toys.

Outdoor exploration is an important aspect and digital recording devices such as tablets can support children in developing communication skills.

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.
- 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.

Implementation

As the aims of Computing are to equip children with the skills needed to use technology to become independent learners, the teaching style we adopt is as active and practical as possible. Children are taught skills and practise these while working in all areas of the curriculum.

Teachers employ a range of strategies including:

- Unplugged activities
- Interaction with the plasma screens
- Discussion with the whole class / group / individuals
- Individual / paired working
- Collaborative group work
- Encouraging children to demonstrate their skills to others and reflect on their learning.

Access & Deployment of Resources

A network infrastructure has been sited so that each classroom has access to:

- At least 5 computers networked to the server (except 2-4 years)
- An interactive plasma screen and laptop
- A minimum of 6 tablets / iPads
- An iPad for each member of staff.

Classes also have access to:

- 7 Bee Bots
- Voice recording equipment e.g. Talking Tin Lids & microphones

The staff room has a computer with large screen – for group work.

A projector and laptop are also available to use in the hall.

Equal Opportunities & Inclusion (see equal opportunities policy)

We are committed to providing a teaching environment conducive to learning. Each child is valued, respected and challenged regardless of ability, race, gender, religion, social background, culture or disability.

We recognise that all classes have children with differing Computing capabilities. This is especially true when some children have access to equipment at home, while others do not. In school all children have equal access and particular needs are supported when and where necessary (through use of classroom assistants, differing resources, varied grouping and differentiated tasks).

Curriculum

The EYFS and National Curriculum are used as a basis for curriculum planning with Project Evolve, Barefoot resources and Teach Computing schemes of work used and adapted where necessary.

Computing throughout the Curriculum

English

Computing is a major contributor to the teaching of literacy. Children develop their speaking and listening, reading and writing skills through the use of computers, talking tin lids, microphones and tablets for video. They play a range of educational games, read texts on screen, record and listen to speech, listen to texts using talking books, learn how to communicate through writing and develop skills to edit and revise their work.

Maths

Many Computing activities build on the mathematical skills of the children. Children use computers in Maths to play educational games, collect data and present information graphically (i.e. in bar charts) and program a toy using directions.

Other Curriculum Areas

Computing is used to enhance all areas of the curriculum, where appropriate.

Special Educational Needs & Gifted and Talented

Computing is taught to all children in school. We aim to provide a broad and balanced education for all children and provide learning opportunities that are matched to the needs of the children.

Using Computing devices can:

- Address children's individual needs i.e. use of www.readingeggs.co.uk to create learning programmes tailored to an individual's needs
- Increase access to the curriculum
- Motivate
- Enhance language skills.

Health & Safety (See Health and Safety Policy & Risk Assessments)

- Children are taught internet safety
- Children are taught the basic rules for handling equipment
- Children are made aware of the correct way to sit when using the computer, and the need to take regular breaks from using the computer.
- Equipment is switched off at the mains overnight.
- All PC's have Sophos Antivirus software installed which updates regularly.
- The school has a 'Responsible Use of the Internet Policy' document.
- Internet websites are filtered by System IT (See E-safety Policy).
- Computers are protected by a firewall managed by the Local Authority to protect children when accessing the internet.

Parental Involvement

Parents are encouraged to support the implementation of IT and computing where possible by encouraging use of IT and computing skills at home for pleasure, through home-learning tasks and use of online individual learning subscriptions.

Children are provided with access to

<https://www.purplemash.com/sch/grasslot>

www.educationcity.com

<https://readingeggs.co.uk/>

<https://mathseeds.co.uk/> and are encouraged to complete activities.

Parents are made aware of issues surrounding e-safety and encouraged to promote this at home.

Assessment and Recording

Teachers assess children's work in Computing by making judgements as they observe them. This assessment is used to support teaching and learning. Children save their work on PurpleMash or in their files on the school network and evidence can also be found in Tapestry Learning Journals.

Monitoring and Review

Monitoring is carried out in the following ways:

- Informal discussions with staff/children;
- Classroom observation;
- Monitoring children's work.
- The Computing governor visits the school to talk with the subject leader when possible and monitors the development of the action plan within the School Development Plan.

The Computing subject leader will:

- Write and review the Computing policy.
- Regularly audit Computing equipment.
- Monitor Computing throughout the school.
- Support colleagues and organise training for the professional development of staff.

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