COMPUTING & SMART GUIDELINES (CURRICULUM)

Reviewer: Daniel Green

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Introduction

This document is a statement of the aims, principles, strategies and procedures for the use of Computing and SMART rules throughout the school.

The Computing curriculum and provision is managed and supported by the ICT team, which includes: Computing subject leader, ICT HLTA and an outside support organisation.

Intent

Computing prepares young people to participate in a rapidly changing society in which work and other forms of activity are increasingly dependent on technology. We develop pupils' information skills, including the ability to use information sources and tools to help them find, explore, develop, analyse, exchange and present information and to support their problem solving, investigative and expressive work.

An essential part is being discriminating about information and the ways in which it may be used, and making informed judgements about when and how to apply aspects of computing to achieve maximum benefit. We also develop understanding of the implications of technology for working life and society.

The use of technology significantly enhances teaching and learning in other subjects by enabling rapid access to knowledge, information and experiences from a wide range of sources. The use of computing throughout the curriculum encourages critical thinking, imagination and creativity, problem solving, initiative and independence, teamwork and reflection.

Aims

- To allow children to develop an awareness of the safe use of technology;
- To help achieve National Curriculum requirements in other curriculum areas through the use of technology;
- To allow staff and children to gain confidence in, and enjoyment from, the use of technology;
- To ensure that staff and children alike understand the capabilities and limitations of technology and gain insight into the implications of its development for society.

National Curriculum

At Key Stages 1 and 2, schemes of work are planned in accordance with the requirements stated in the National Curriculum document. Cross-curricular links are explored where appropriate.

Planning & Teaching

As the aims of Computing are to equip children with the skills necessary to use technology to become independent learners. The teaching style that we adopt is as active and practical as possible. While at times we do give children direct instruction on how to use hardware or software, the main emphasis of our teaching in computing is for individuals or groups of children to use technology to help them in their learning across the curriculum. So, for example, children might research a history topic or investigate a particular issue on the internet. Children who are learning science or maths might use the computer to model a problem or to analyse data. We encourage children to explore ways in which the use of technology can improve their results, for example, how a piece of writing can be edited or how the presentation can be improved by moving text around or altering its appearance.

We recognise that all classes have children with widely differing computing abilities. This is especially true when some children have access to equipment at home, while others do not. As well as providing access to technology through extra-curricular clubs and activities, we provide suitable learning opportunities for all children by matching the challenge of the task to the ability and experience of the child.

Lessons are planned according to units outlined on the school's curriculum plan which has been based on the National Centre for Computing Education scheme of work and then adapted to suit the needs of our pupils. Within these units, planning takes account of the progression of skills within the National Curriculum.

Lessons teach skills that enable pupils to ask and answer important questions. They focus on learning through interaction with technology, practising skills whilst furthering their knowledge.

Implementation

Progression for all pupils

At Whitegrove we provide a broad and balanced curriculum for all our pupils. We recognise the fact that there are children of widely different abilities and varying needs in all classes, and we provide suitable learning opportunities for all children by differentiating activities within computing to ensure that the specific needs of individual children are best met. Children are encouraged and supported to develop their skills in this subject.

We achieve this by:

- responding to pupils' diverse learning needs;
- setting tasks which are open-ended and can have a variety of responses;
- setting tasks of increasing difficulty;
- providing resources of different complexity, according to the ability of the child;
- increasing both the degree of skill (e.g. handling documentary evidence) and knowledge and understanding.

- using classroom assistants and HLTAs to support the work of individuals or groups of children.

Assessment

Children's progress in Computing is assessed against the Age-Related Expectations. These describe the types and range of performance that the majority of pupils should characteristically demonstrate, having been taught the relevant programmes of study.

The Role of the Computing Subject Leader

The main task of the Computing Subject Leader, in consultation, is to support colleagues and so improve the quality and continuity of computing teaching in the school.

The subject leader is responsible for:

- Supporting and working with colleagues and keeping them informed of changes and developments within their subject.
- Monitoring the relevance, continuity and progression of the Computing curriculum throughout the school and recommending any action needed.
- Providing advice about the Computing guidelines and schemes of work.
- Keeping, updating and extending resources, ensuring staff are aware of their availability and identifying future needs.
- Keeping own skills and knowledge up to date through reading and attending relevant courses and by developing links with sources of expertise and information beyond the school.

Resources

Every classroom in our school is equipped with either a networked computer or laptop docking station and an electronic whiteboard. In addition, tablets for use in EYFS, a class set of Chromebooks in Years 5 and 6, and a large number of additional Chromebooks which can be used across the rest of the school. As well as computers the children have access to many curriculum-based items such as Micro:bits, OhBots, roamers, cameras etc. The school has internet access capability in all classrooms. The outside support organisation is responsible for the installation and upkeep of resources throughout the school.

Use of Portable Equipment

The school provides portable computing equipment such as laptop computers, Chromebooks, colour printers and digital cameras to enhance the children's education and to allow staff to make efficient use of such equipment to enhance their own professional activities.

Equipment may be in the care of a specific individual/year group, but it is expected that all staff may wish to benefit from the use of the equipment and access should be negotiated with the individual/year group concerned.

Any difficulties should be reported to the Computing subject leader.

No images of children stored on removable/portable devices should be removed from school property unless for part of an educational activity. Staff should not use personal camera, mobile phones, laptops etc. to store images of children away from the school property.

Care of Equipment

Any individual to whom equipment is entrusted should maintain it in a clean and serviceable state.

- All equipment should be switched off at the end of the working day.
- Any technical fault should be reported immediately to the external support organisation.

Acceptable Use Statement

The computer system is owned by the school, and may be used by children to further their education and by staff to enhance their professional activities including teaching, research, administration and management.

The school recognises that technologies such as the Internet and e-mail will have a profound effect on children's education and staff professional development in the coming years and the school's E-Safety Policy has been drawn up accordingly.

The installation of software or hardware unauthorised by the school, whether legitimately licensed or not is expressly forbidden.

The school reserves the right to examine or delete any files that may be held on its computer systems or to monitor any Internet sites visited.

SMART Guidelines

SAFE, keep **SAFE** and don't give out personal information including your name and address, phone numbers and passwords.

MEETING someone you only know from the internet can be dangerous. If you must go, take an adult with you.

ACCEPTING emails or opening files from people you don't know can cause problems. Always speak to an adult first.

RELIABLE, some information on the internet may not be **RELIABLE**. People may not be who they say they are. Always check your information.

TELL your teacher, parent or carer if something or someone on the internet make you feel uncomfortable.

Support for Computing Guidelines

We will continue to update/provide awareness from information ascertained from:

ThinkUKnow

Thinkuknow is an education programme from the National Crime Agency's CEOP Command. Since 2006, Thinkuknow has been keeping children and young people safe by providing education about sexual abuse and sexual exploitation. Thinkuknow is unique. It is underpinned by the latest intelligence about child sex offending from CEOP Command.

Thinkuknow aims to ensure that everyone has access to this practical information – children, young people, their parents and carers and the professionals who work with them.

https://www.thinkuknow.co.uk/parents/