King George V Primary School

Computing Policy - January 2016

Introduction

The use of computers and computer systems are an integral part of the national curriculum. Knowing how they work will help children to acquire key life skills. In an increasingly digital world, there now exists a wealth of technologies that can be used to communicate and express ideas in a creative manner. At King George V Primary School, we recognise that pupils are entitled to a broad and balanced computing curriculum in which they develop skills to become digitally literate and are able to fully participate in the modern world.

Aims and Objectives

At King George V Primary School, we aim to:

- Provide all pupils and staff opportunities to develop their computing knowledge,
- Allow pupils and staff to gain confidence and enjoyment from a variety of computing activities,
- Help develop, extend and enhance pupils' computing skills,
- Help pupils understand the ongoing changes in technology and the changing role of computers in the wider world,
- Ensure pupils are aware of how to use computers safely and responsibly.

National Curriculum

The new national curriculum 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.

Planning

The school uses the Rising Stars programme to ensure that there is a consistent whole school approach towards Computing. Rising Stars fully meets the objectives of the new Computing curriculum and allows for clear progression from early years through to year 6. Staff follow the Rising Stars planning guidance to ensure full coverage of all objectives stated in the curriculum.

A minority of children will have particular teaching and learning requirements which go beyond the provision for that age range and if not addressed, could create barriers to learning. This could include G&T children, those with SEN or those who have EAL. Teachers take account of these requirements and plan, where necessary, to support individuals or groups of pupils to enable them to participate effectively in the planned activities.

Teaching and Learning

The aim at King George V is to equip children with the Computing skills necessary to become independent and responsible users of a wider variety of technology including computers, tablets, cameras, and robots. All resources are available to all pupils including an ICT suite which is encouraged to be used at least once a week for an hourly slot in which children can develop both computing and ICT skills.

We also aim to make as many cross-curricular links as possible. For example, children might be asked to use the internet to research a history topic. In maths, they may be asked to use their knowledge of algorithms to direct a robot using instructions that include compass directions and measures of angles. We emphasise writing for a purpose with the school blog and twitter account. (Further examples can be found in theme overviews.)

Monitoring and Assessment

At King George V Primary School, teachers assess children's work and progress in Computing by making informal judgements by observing children in lessons. Furthermore, understanding of what has been learnt is checked through appropriate questioning and on completion of a piece of work, teachers mark and comment as necessary.

Monitoring of coverage and standards of children's work is the responsibility of the Computing lead. Work from across school will be collected, evaluated and feedback will be given to staff.

Summaries of children's questionnaires will also be given to help inform future planning and where appropriate, staff inset and training will also be provided to help further knowledge of the Computing curriculum.

Equal Opportunities

All children have the opportunity to develop their computing capabilities. We ensure that all of our pupils have equal access to computing resources and that all software and resources used are appropriate to both age and ability.

Security

All networked computers including networked laptops will have filtered internet access when in school. Prior to use with the children, all staff should ensure that they review resources available on websites and ensure that they are appropriate to the age range and abilities of children.

The school's computers should not be used at any time for copying, downloading or storing any illicit or offensive material.

All users of the network need to be aware that their individual files may be accessed by the network administrator at any time and any inappropriate files will be removed immediately.

Staff who wish to download any apps, files and software need to discuss with the Computing co-ordinator or Headteacher first and will be agreed if suitable.

Extra- Curricular Opportunities

- An after school computing club is offered to children in which they have the opportunity to further develop essential skills through using programmes such as Python.
- As part of Internet Safety awareness, we host an internet safety week in the Spring term in which children participate in a range of activities highlighting the importance of e-safety and cyber bullying.
- On occasion, outside companies such as LEGO are invited into school to teach the children how their computing skills can be used in all areas of life e.g. using code to make lego animals move.
- Giving children the opportunity to blog with children from other schools in other countries through a programme called Quadblog which also links to celebrating diversity and learning about other cultures.