Alexander Hosea Primary School

`Roots to grow, wings to fly'

Computing Policy

Introduction

The use of Information and Communication Technology (ICT), computers and computer systems are an integral part of the National Curriculum, which plays an ever increasing role in children's lives in the technological age. 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. At Alexander Hosea Primary School we recognise that pupils are entitled to a broad and balanced Computing education with a structured and progressive approach to the learning of how computer systems work, the use of Information Technology (IT) and the skills necessary to become digitally literate and participate fully in the modern world. The purpose of this policy is to state how the school intends to make this provision.

Our policy is underpinned by the School's ASPIRE values and aims.

Adaptability
Self-belief
Perseverance
Inclusion
Respect
Enquiry

Aims:

- To provide a broad, balanced, challenging and enjoyable curriculum for all pupils.
- To develop pupil's computational thinking skills that will benefit them throughout their lives.
- To meet the requirements of the Early Years Foundation Curriculum and the National Curriculum programmes of study for computing at Key Stage 1 and 2
- To respond to new developments in technology
- To equip pupils with the confidence and skills to use digital tools and technologies throughout their lives.
- To enhance and enrich learning in other areas of the curriculum using IT and computing.
- To develop the understanding of how to use computers and digital tools safely and responsibly

The National Curriculum for Computing 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.

Guidelines

Objectives
Early Years Foundation Stage (EYFS)

It is important in the foundation stage to give children a broad, play-based experience of IT and computing in a range of contexts, including off-computer activities and outdoor play. The EYFS curriculum states that children should 'recognise that a range of technology is used in places such as homes and schools and they select and use technology for particular purposes.'

National Curriculum

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 a sequence of instructions.
- Write and test simple programs.
- Use logical reasoning to predict and computing the behaviour of simple programs.
- Organise, store, manipulate and retrieve data in a range of digital formats.
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

By the end of key stage 2 pupils should be taught to:

- Design and write 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; generate appropriate inputs and predicted outputs to test programs.
- Use logical reasoning to explain how a simple algorithm works 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.
- Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Resources

Each class has regular timetabled access to our computer suite, which has 32 laptops, and to two trolleys of netbook computers which can be used in classes. There are also 32 LearnPad tablets split between KS1 and KS2 for children to access, when required, to support and enhance their learning. To meet the needs of the Computing curriculum, there

are variety of further IT resources provided in school for example: programmable devices, video cameras and green screen facilities. All IT resources are available to be used as part of computing lessons and for cross curricular use.

We regularly audit and review hardware resources and changes in modern technology to update the Strategic ICT Development Plan. Purchases are made in line with this plan.

All hardware is safely locked away when not in use and is to be disposed of in line with current South Gloucestershire Policy with guidance and assistance from the IT Department at South Gloucestershire Council.

Curriculum

We use the South Gloucestershire Computing Scheme of Work to support the planning and delivery of the computing curriculum. Teachers adapt the planning and resources to suit the needs of the children and the context of the learning. All children will be taught objectives from the five areas of the computing scheme of work: programming, data, media, online safety and the impact of technology.

Regular training is provided for staff to ensure that they are familiar with the expectations of the computing curriculum and both the software and hardware they will be using.

Assessment

Assessment forms an important part of delivering the computing curriculum, to ensure that teaching and learning are progressive and that children are working towards National Curriculum objectives. We assess the children's learning in computing by making judgements as we observe the children during lessons, recording these judgements as part of our Non-Core assessments.

All teaching and support staff at Alexander Hosea School are responsible for inclusion and ensuring that all children, irrespective of gender, ability, ethnic origin and social circumstances, have access to the whole curriculum and make the greatest possible progress.

Special Educational Needs and Disability / Gifted and Talented

Needs will be identified and tracked through assessment grids. Additional use of IT may be necessary to support children with SEND. Teachers will plan for individuals to make progress and reach high levels of attainment.

Safety

- All purchases of hardware and software for school must be authorised by the Head teacher and School Business Manager. An inventory of hardware and software is maintained by the ICT Leader and School Business Manager and checked annually.
- No illegal or privately owned software should be brought onto the site with the intention of loading this software onto any school IT equipment.
- No software should be downloaded from the internet or other external sources unless arrangements have been made with the IT department at South Gloucestershire for appropriate licence vetting and virus checking.
- All staff MUST use their South Gloucestershire e-mail accounts for school related communication.
- Display screen audits are completed by staff who spend substantial time in front of the ICT screens (administration staff).
- Access to the curriculum and administration servers are password protected.
- Curriculum is virus protected by the IT department at South Gloucestershire
- SWGFL provide an internet filter

- All governors, members of staff and pupils MUST keep their password safe and not share it

This policy should be read in conjunction with the Online Safety Policy, Equal Opportunities Policy and Acceptable Use Policy.

Equalities Impact Assessment (EIA)
This policy has been screened to ensure that we give 'due consideration' to equality of opportunity and has been agreed and formally approved by the appropriate reviewing and ratification Committee.

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