Greenways Primary Academy

Computing Policy 2021-2023

MAT Policy updated:	2019	2021
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Next review date:	2021	2023

Introduction

The use of Computing is an integral part of the National Curriculum, it enables learners to participate more readily in a rapidly changing world. At Greenways Primary Academy, our aim is to prepare children with the substantive and disciplinary knowledge needed to be active participants in an ever-changing digital world. We will therefore offer opportunities for them to develop the knowledge, creativity and enthusiasm to live and thrive in a world increasingly dependent on computing.

What is more, the children at Greenways Primary Academy will also use the internet in a safe and respectful way, understanding the necessary precautions to take to stay safe and know where to seek help. They will utilise computing efficiently to enhance their learning in all subjects, and as proficient computer scientists, they will have the opportunity to write and debug codes successfully and do this with confidence, before programming them into the different systems, software and devices they are using.

Overall, children at Greenways Primary Academy will become digitally literate – able to use a range of media, express themselves and develop ideas through information technology; they will be prepared to become active, responsible citizens in a digital world. They will also be able to make links between different areas of computing and between computing and the wider world.

Purpose

This policy aims to reflect the academy values and philosophy in relation to the teaching and learning of Computing. It is intended as an outline to establish what we will do and as a guide for teachers, non-teaching staff, parents and governors.

The purpose of the Computing policy at Greenways Primary Academy is:
- To establish a framework for teaching and learning which meets the requirements of the Computing Curriculum;
- To promote a good understanding of what Computing, Digital Literacy and Information and Communication Technology (C, DL and ICT) are and how they will look at Greenways;
- To establish clear expectations for staff and pupils;
- To promote continuity and coherence throughout the academy;
- To establish clear procedures and guidelines for staff to operate within.

Aim High and be a Star

Computing Curriculum:

At Greenways Primary Academy, we aim to provide a computing curriculum that is creative, inclusive, challenging and inspired by the real-world. We follow the curriculum created by the National Centre for Computing Education (NCCE), which is funded by the Department for Education. Our curriculum is enriched through the use of high-quality resources (provided by the NCCE to match their curriculum), programs and software. Our computing curriculum and the lessons we teach inspire future thinkers, innovators and problem solvers in an immersive environment that stimulates curiosity and supports high-quality learning, allowing each and every learner to fulfil their potential.

The computing areas of study are set out in the National Curriculum 2014.

EYFS:

Computing is not explicitly mentioned within the Early Years Foundation Stage (EYFS) statutory framework, which focuses on the learning and development of children from birth to age five. There are many opportunities for young children to use technology to solve problems and produce creative outcomes through completing activities that are linked to the framework and topics delivered.

KS1 and KS2:

The Primary National Curriculum for Computing aims to ensure that all pupils:

- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- 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

With this in mind, our programme of study for computing clearly sets out what will be taught and learned at each point in the year for all year groups.

Special Educational Needs
Through the equal opportunities policy, pupils with special educational needs will be included in all computing lessons. Staff, where appropriate, will modify activities to ensure children with special educational needs access the same computing curriculum as their peers.

British Values in Computing

Pupils at Greenways Primary Academy demonstrate the following values through their learning of Computing, Digital Literacy and Information and Communication Technology:

Democracy

- Listening to ideas in order to form a majority.
- Working as part of a team and collaborating to use computing devices effectively.

Rule of Law

- Developing knowledge of lawful computing behaviours.
- Demonstrating respect for computing laws.

Individual Liberty

- Taking responsibility for our own computing behaviours.
- Challenging stereotypes and bias.
- Exercising rights and personal freedoms safely through knowledge of E-Safety.

Respect and Tolerance

- Showing respect for other cultures when undertaking research using computing devices.
- Providing opportunities for pupils of all backgrounds to achieve in computing.

Teaching and Learning

A weekly slot is timetabled to ensure that access to the computing hardware is guaranteed for each class. The guidelines below are followed by each teacher:

- Computing is taught as a discrete discipline (Year 1 to Year 6).
- The teaching of new DL/ICT skills should be discrete (e.g. basic skills in using new software and/or equipment);
- Children should be given as many opportunities as possible to apply their C, DL and ICT skills across the curriculum and in creative ways (e.g. as an option to present work);
- The class teacher must ensure through careful planning and reviewing, that each learning objective from the C and DL / ICT curriculum is covered thoroughly and that C and DL / ICT are an integral part of the whole curriculum.
- Planning must be centred on the needs of the pupils and designed to meet a range of differing needs, including those needing additional support.

Roles and Responsibilities

The Computing Lead – The academy has a designated Computing Lead to oversee the planning, teaching and organisation of Computing and ICT / DL. The Computing lead will be responsible for:

- Raising standards in Computing and ICT / DL across the academy by:
- ⇒ Supporting others in planning, teaching and assessment;
- ⇒ Facilitating the use of ICT across the curriculum, in collaboration with other subject coordinators;
- ⇒ Ensuring staff are up to date with training to enable them to deliver the curriculum confidently and effectively.

⇒ Providing advice to staff in terms of resourcing, planning, using software and equipment, effective resources;

⇒ Managing academy resources to ensure we have the technology to be able to deliver the new curriculum effectively;

⇒ Monitoring the planning and delivery of the new Computing curriculum and reporting to the Headteacher.

The Headteacher and Trust Board – The Headteacher and Trustees provide support for the Computing lead to fulfil their role, as outlined above. They will provide support by:

- Ensuring teachers are able to deliver the new curriculum by having access to the appropriate training and resources necessary;
- Providing opportunities for the Computing Lead to work with staff to plan and deliver lessons for the new curriculum;
- Reviewing policies relating to Computing, E-safety and Information Security.

The Class Teacher – The class teacher must:

- Follow the guidelines set out in the Computing, E-safety and Information Security policies.
- Plan effective lessons where children learn new knowledge building on previous knowledge through a coherent progressive sequence of lessons.
- Provide many opportunities for Computing and ICT / DL skills to be applied by pupils in a variety of ways, using a wide range of technology and software;
- Plan lessons which will support and/or challenge pupils as appropriate;
- Ensure they have access to a range of necessary resources to be able to deliver the curriculum effectively. This includes liaising with the Computing Lead to ensure that resources are available, equipment is ready to be used, and returning equipment for others to use. Any breakages or faults must be reported by teaching staff to the Computing Lead.
- Ensure support staff have access to planning and have the knowledge and skills to be able to support and challenge them in completing tasks.

Support Staff – Support staff must:

- Ensure they have the relevant planning necessary to support and challenge pupils;
- Ask for support from the class teacher and/or Computing Lead to ensure their training requirements are met.

Resources and Access

ICT resources are accessed and deployed in a number of ways throughout the academy. This ensures the maximum amounts of resources are available and easily accessible to support delivery of an effective and powerful computing curriculum. At present we have:
- 8x iPads & 15x Android Tablets are stored securely in the locked cupboard. Class teachers must request any Apps they may need, which will be purchased by the Computing Leader;
- 1x staff laptop per classroom. This can be used by the teacher to display learning materials, or by children as directed by the teacher.
- 1x iPad per Senior Leadership member.

- A bank of laptops that are stored securely and locked in a charging unit. These are used by the children where appropriate, and can be an independent task or adult-led;
- Laptops and tablets are timetabled to ensure that all classes are able to access them throughout the week.
- 1 interactive screen per classroom – to be used as a teaching tool by staff or to aid learning in group work by children;
- Other resources available include: Bee-bots and mats.

A school network enables internet access to all devices in the academy building. The school network is secure and can only be accessed by user name and password – monitored by the Computing Leader. The network also offers access to a shared area in which documents are stored and accessed. Please refer to the E-safety, Acceptable Usage and Information Security policies for further details.

E-Safety

Internet access is planned to enrich and extend learning activities. The academy has acknowledged the need to ensure that all pupils are responsible and safe users of the Internet and other communication technologies. We aim to provide a curriculum which includes education on how to stay safe online and when using other technology. We also offer a safe online environment through filtered internet access. Please refer to the Trust E-safety, Acceptable Usage and Information Security policies for further details.

Other documentation

Please also refer to the following documents for further and supporting information:
- E-safety policy
- Pupil and parent signed agreements
- Staff signed agreements
- KS1 and KS2 National Curriculum Coverage documents
- National Curriculum Level Descriptors for 2014