GREENLEAS PRIMARY SCHOOL
COMPUTING POLICY

Overview

This Computing policy sets out Greenleas Primary School's aims and strategies for the successful delivery of Computing and Online Safety. The policy has been developed by the Computing Leader (Mr McNerlin) in consultation with the SENCO, Senior Leadership Team and teachers. Guidance from consultants and pupil and staff voice questionnaires have shaped and will continue to help shape this policy. This policy is based on government statutory programmes of study. Due to the fast pace of technology innovation and constantly emerging trends, it is recommended that this policy is reviewed, at minimum, at the start of every academic year.

Curriculum Aims:

- Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.
- Teach pupils to become responsible, respectful and competent users of data, information and communication technology.
- Provide technology solutions for forging better home and school links.
- Enthuse and equip children with the capability to use technology throughout their lives.
- Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Utilise computational thinking beyond the Computing curriculum.
- Give children access to a variety of high-quality hardware, software and unplugged resources.
- Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves or others.
- Exceed the minimum government recommended/statutory guidance for programmes of study for Computing and other related legislative guidance (online safety).
- Instil critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with technology and its associated resources.
- Use technology imaginatively and creatively to inspire and engage all pupils, as well as using it to be more efficient in the tasks associated with running an effective school.

COMPUTING STATEMENT OF INTENT

Intent

At Greenleas, we prepare our learners for their future by giving them the opportunities to gain knowledge and develop skills that will equip them for an ever-changing digital world. Knowledge and understanding of Computing, and technology in general, is of increasing importance for children's future both at home and for employment. We are preparing children by giving them the skills to prepare for jobs that do not yet exist. We believe that technology can provide: enhanced collaborative learning opportunities; better engagement of pupils; easier access to rich content; support conceptual understanding of new ideas and can support the needs of all our pupils. Technology is everywhere and will play a crucial part in our students' lives. Therefore, we want to model and educate our pupils on how to use technology positively, responsibly, and safely. We want our pupils to understand that there is always a choice with using technology and as a school we utilise technology to model positive use. We recognise that the best prevention for a lot of issues we currently see with technology, and specifically social media, is through education. Our Computing curriculum focuses on a progression of skills in digital literacy, computer science, information technology and online safety to ensure that children become confident and competent in safely using and understanding technology. These areas are continually revisited through a range of learning opportunities during children's time in school to ensure the learning is embedded and skills are successfully developed. Our intention is that Computing also supports children's creativity and cross-curricular learning to engage children and enrich their experiences in school.

Implementation

As a school, we use the Purple Mash Computing scheme of work consistently across phases and year groups. Alongside this, children are given cross-curricular opportunities to explore a range of technology in day-to-day schooling. We teach from the National Curriculum, supported by a clear skills and knowledge progression. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children. To ensure a broad range of skills and understanding, Computing is taught across three main strands throughout year groups: computer science, digital literacy, and information technology. Within information technology, children learn to use and express themselves to develop their ideas through researching effectively, using search technologies, and combining a variety of soft and hardware to accomplish a given goal. Regarding digital literacy, children develop practical skills in the safe use of technology and the ability to apply these skills to solving relevant, worthwhile problems for example understanding safe use of internet, networks and email. In computer science we teach children design new software, solve computing problems and develop different ways to use technology. This includes designing and debugging programs, working with various forms of input and output, and reasoning their understanding to find solutions to problems. At all times children are working on their Computational Thinking. A progressive Computing vocabulary and glossary of key terms is vital to the children's skillset, and these are introduced and kept in knowledge organisers, across each strand, in each year group. At Greenleas, Online Safety is of paramount importance. It is crucial that children apply into their own lives, the information they so regularly hear in school about how to keep themselves safe and happy in the online world. Online Safety is shared with parents and carers through regular updates and workshops.

Impact

The implementation of this curriculum ensures that when children leave Greenleas, they are competent and safe users of technology with an understanding of how technology works, its positive and negative attributes, and more importantly how to navigate the technological world safely. They will have developed skills to express themselves and be creative in using digital media and be equipped to apply their skills in Computing to different real-world challenges going forward.

Early Years

We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts. We believe the following:

- Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in role-play.
- Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys (bee bots).
- Outdoor exploration is an important aspect, supported by ICT toys.
- Recording devices can support children to develop their communication skills. This is especially useful for children who have English as an additional language.

Key Stage 1 outcomes

- 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.
- 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.

Key Stage 2 outcomes

- 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.

Monitoring, Evaluation and Feedback

Monitoring standards of teaching and learning within Computing is the responsibility of the Computing Leader and relevant class teacher. All teachers are expected to keep an online portfolio and track children's work using Purple Mash. This portfolio must contain work samples from all areas of the curriculum taught for the year group. Details of monitoring and evaluation schedules can be found in the Computing Action Plan.

Monitoring will be achieved through:

- Work scrutiny, learning walks, observations, pupil voice and teacher voice.
- Reflective teacher feedback.
- Learning environment monitoring.
- Computing Leader time.

Evaluation and Feedback will be achieved through:

- Computing Leader time.
- Using recognised standards documentation for end-of-year expectations.
- Using recognised national standards for benchmarking Computing provision in primary schools.
- Written feedback on evaluation of monitoring activities to be provided by the Computing Leader in a timely manner.
- Feedback on whole school areas of development in regard to Computing to be fed back through insets/AOB/staff meetings.

Safeguarding – Online Safety

Online safety is of the highest importance at Greenleas Primary School. We ensure that children and staff understanding how to keep themselves safe when navigating the online world. These are met through the following:

- A relevant up-to-date online safety curriculum which is progressive from Early Years to the end of Year 6.
- Through our home/school links and communication channels, parents are kept up to date with relevant online safety matters, policies and agreements. They know who to contact at school if they have concerns.
- Policies which stipulate how we keep confidential information secure.
- A curriculum that is threaded throughout other curriculums and embedded in the day-to-day lives of our pupils.
- Acceptable Use Policies which are signed.
- Training for staff which is relevant to their needs and ultimately positively impacts on the pupils.
- Incidents that take place online are dealt with appropriately and swiftly.
- Filtering and monitoring systems for all our online access.

Roles and Responsibilities

Computing Leader and Co-ordinator (Mr McNerlin)

- Raising the profile of Computing for all stakeholders.
- Highlight areas for the development of ICT within the Computing action plan and be aware of the annual budget available for this.
- Review the continuing professional development needs of all staff and provide suitable training opportunities.
- Disseminate relevant information on computing developments to all members of staff.
- Keep up to date with developments and new technologies.
- Take a lead on implementing and teaching the schools scheme of work, ensuring a whole school approach to the planning, recording and assessment of Computing.

- Be in regular contact with Technician regarding school issues liaising closely to ensure good use of time.
- Ensure the iPads and Laptops are kept securely and are charged and ready for use.
- Manage the timetables for the use of iPads and Laptops.
- Support staff where needed on the implementation of new curriculum, and how to best utilize the equipment we have.
- Ensuring assessment systems are in place for Computing.
- Maintaining overall consistency in standards of Computing across the school.

Administration Staff
- Maintains the school website content.
- Posts approved requests to the school's social media accounts. Supports procurement of resources and technical services.
- Supports the technician with some data management.

Technician
- Conducts routine scheduled maintenance/updates on systems.
- Supports the administration and set-up of online services including the school website.
- Fixes errors/issues with hardware and software set-up, prioritising as needed.
- Routinely checks school filtering, monitoring and virus protection.
- Sets up new hardware and installations.
- Maintains network connectivity and stability.
- Supports the Computing Leader and Head Teacher with future infrastructure needs and associated projected costs.

Resources

We currently possess the following hardware:
- iPad Mini (2 trolleys)
- Class Teacher iPads
- Toshiba laptops (1 trolley)
- Chromebooks (1 trolley)
- 4 colour printers and 1 photocopier

Equal Opportunities

Priority will be given to ensure equality of access and quality of experience for all pupils irrespective of race, gender, disability, age or class to develop their own level of ICT capability.

We must ensure that all our pupils:
- Have equal access to resources,
- Have equal opportunities to develop ICT capability
- Use software, which is appropriate to their ability

Pupils with Special Educational Needs

SEN pupils benefit from using technology as it enhances access to the curriculum, and this in turn encourages motivation and the development of skills ensuring higher achievements. Therefore, the opportunities to utilise technology should be maximised.

Health and Safety
- Greenleas Primary School takes all necessary measures to ensure both staff and pupils are aware of the importance of health and safety.
- Both staff and pupils are trained to handle electrical equipment correctly including how to power off and on. Pupils are reminded about the dangers of electricity and the danger signs to look out for. Adequate displays and warning signs are strategically placed around the school to reinforce health and safety.

Revised and adopted by the Governing Body January 2023.