

# Green Park Community Primary School

## Computing Policy 2021-22



**Date written: September 2021**

**Date agreed and ratified by Governing Body: September 2021**

**Date of next review: September 2022**

This policy will be reviewed **at least** annually. It will also be revised following any concerns and/or updates to national and local guidance or procedures.

## **Introduction**

This policy sets out Green Park's aims and strategies for the successful delivery of Computing. This policy should be read in conjunction with other relevant school policies such as the Safeguarding, Equal Opportunities, Curriculum, Teaching & Learning, SEND and Assessment policies.

The policy has been developed by the Computing Subject Lead (Mr Carpenter) in consultation with the SENCO, Leadership Team and teachers. This policy is based on government recommended/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 cycle.

The use of computers and computer systems is an integral part of the National Curriculum and knowing how they work is a key life skill. 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 Green Park we recognise that pupils are entitled to a broad and balanced computing education with a structured, progressive, approach to the learning how computer systems work, the use of 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.

## **Aims**

Green Park believes that every child should have the right to a curriculum that champions excellence; supporting pupils in achieving to the very best of their abilities. We understand the immense value technology plays not only in supporting the Computing and Whole School curriculum but overall in the day-to-day life of our school. We believe that technology can provide: enhanced collaborative learning opportunities; better engagement of pupils; easier access to rich content; support conceptual understanding of new concepts and can support the needs of all our pupils.

- Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.
- Enthuse and equip children with the capability to use technology throughout their lives.
- Give children access to a variety of high quality hardware, software and unplugged resources.
- Instill critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with technology and its associated resources.
- Teach pupils to become responsible, respectful and competent users of data, information and communication technology.

- Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- 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.
- 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.
- Provide technology solutions for forging better home and school links.
- Utilise computational thinking beyond the Computing curriculum.
- Exceed the minimum government recommended/statutory guidance for programmes of study for Computing and other related legislative guidance (online safety).

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.

### **Safeguarding: Online safety**

Online safety has a high profile at Green Park. We ensure this profile is maintained and that pupil needs are met by the following:

- A relevant up-to-date online safety curriculum which is progressive from Early Years to the end of Year 6.
- A curriculum that is threaded throughout other curriculums and embedded in the day-to-day lives of our pupils.
- Training for staff and governors which is relevant to their needs and ultimately positively impacts on the pupils.
- Scheduled pupil voice sessions and learning walks steer changes and inform training needs.
- 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.
- Pupils, staff and parents have Acceptable Use Policies which are signed and copies freely available.
- Our online safety policy (part of our safeguarding policy) clearly states how monitoring of online safety is undertaken and any incidents/infringements to it are dealt with.
- Filtering and monitoring systems for all our online access.

- Data policies which stipulate how we keep confidential information secure.

## **Curriculum**

As a school, we have chosen the Purple Mash Computing Scheme of Work from Reception to Year 6. The scheme of work supports our teachers in delivering fun and engaging lessons, which help to raise standards and allow all pupils to achieve to their full potential. We are confident that the scheme of work more than adequately meets the national vision for Computing. It provides immense flexibility, strong cross-curricular links and integrates perfectly with the 2Simple Computing Assessment Tool. Furthermore, it gives excellent supporting material for less confident teachers.

## **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 roleplay.
- Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys.
- Outdoor exploration is an important aspect, supported by ICT toys such as metal detectors, controllable traffic lights and walkie-talkie sets.
- 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**

- 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**

- 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 worldwide 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.

### **Cross Curricular Links**

As a staff we are all aware that IT and computing skills should be developed through core and foundation subjects. Where appropriate, IT and computing should be incorporated into schemes of work for all subjects. IT and computing should be used to support learning in other subjects as well as developing computing knowledge, skills and understanding. Our school provides pupils with opportunities to enrich and deepen learning using cross-curricular approaches and uses Purple Mash, which embeds computing in English, Mathematics, Science, Geography and History from Year 1 to Year 6.

### **Inclusion**

At Green Park, we aim to enable all children to achieve to their full potential. This includes children of all abilities, social and cultural backgrounds, those with disabilities, EAL speakers and those with EHCPs.

We place particular emphasis on the flexibility technology brings to allowing pupils to access learning opportunities, particularly pupils with SEN and disabilities. With this in mind, we will ensure additional access to technology is provided throughout the school day and in some cases beyond the school day.

### **Pupils with Special Educational Needs (see also SEN policy)**

We believe that all children have the right to access IT and computing. In order to ensure that children with special educational needs achieve to the best of their ability, it may be necessary to adapt the delivery of the computing curriculum for some pupils.

We teach IT and computing to all children, whatever their ability. Computing forms part of the national curriculum to provide a broad and balanced education for all children.

Through the teaching of computing we provide opportunities that enable all pupils to make progress. We do this by setting suitable challenges and responding to each child's individual needs. Where appropriate IT can be used to support SEN children on a one to one basis where children receive additional support.

### **Equal Opportunities (see also Equal Opportunities Policy)**

We will ensure that all children are provided with the same learning opportunities regardless of social class, gender, culture, race, disability or learning difficulties. As a result, we hope to enable all children to develop positive attitudes towards others. All pupils have equal access to computing and all staff members follow the equal opportunities policy. Resources for SEN children and gifted & talented will be made available to support and challenge appropriately.

## **Resources**

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards consistent, compatible computer systems by investing in resources that will effectively deliver the objectives of the National Curriculum and support the use of IT, computer science and digital literacy across the school. Teachers are required to inform the Computing Subject Lead of any faults as soon as they are noticed. Resources, if not classroom based, are located in the Computing Suite. A service level agreement with EiS is currently in place to help support the subject leader to fulfill this role both in hardware & software.

- All resources are procured with the underlining considerations of value: The extent at which the resource impacts on learning and the material cost of this.
- A range of resources is available which successfully supports delivering the Computing curriculum and enables all learners to reach their full potential.
- Resources are suitably maintained and replenished when needed, which is overseen by the Computing Subject Lead.
- An itemised list of all resources is shared with staff and kept up to date by the Computing Subject Lead.
- Audits of school resources are conducted regularly by the Computing Subject Lead, which informs bidding for budgets allocations.
- The Computing Subject Lead keeps up to date with the latest technology resources and will make informed decisions about possible procurement of them through their own research.
- Suggestions for getting the very best out of the resources are made available to teaching and support staff by the Computing Subject Lead.
- The Computing Action Plan details foreseen future resource procurement which is shared with senior leaders before the budget setting period.

Computing network infrastructure and equipment has been sited so that:

- Every classroom from EYFS to Y6 has a computer connected to the school network and an interactive whiteboard with sound and video facilities.
- All classes have at least one computer for children to use as part of their continuous provision and cross-curricular access.
- There is computing suite of 30 desktops.
- There is a set of 15 iPads per class in Years 1-6 and 18 iPads in EYFS complete with charging and lockable storage cabinets in school.
- Internet access is available in all classrooms.
- Each class from Y1 – Y6 has an allocated slot once per week for teaching computing as a discrete subject.

- The computing suite and iPads are available for use throughout the school day as part of computing lessons and for cross-curricular use.
- Pupils may use IT and computing independently, in pairs, alongside a TA or in a group with a teacher.
- A governor will be invited to take a particular interest in computing in the school.

### **Assessment**

- Pupil attainment is assessed using the 2Simple Computing Assessment Tool for Years 1 to 6. The tool enables staff to accurately identify attainment of pupils through the detailed exemplification it has for each key learning intention.
- Teachers keep accurate records of pupil attainment by entering data using the 2Simple Computing Assessment Tool.
- Tracking of attainment by using the 2Simple Computing Assessment Tool is used to inform future planning.
- Children are encouraged to self, peer and group assess work in a positive way using online collaborative tools such as 2Blog in Purple Mash.
- Formative assessment is undertaken each session/interaction in Computing and pupils are very much encouraged to be involved in that process. Through using the progression of skills documents and displays from 2Simple, both teachers and pupils can evaluate progress. Features such as preview and correct in Purple Mash are used to further support feedback and assessment.
- Summative assessment is undertaken in line with the assessment cycle (See Assessment Policy). Using electronic work samples from children's portfolios on Purple Mash, teachers enter judgements about the samples into the 2Simple Computing Assessment Tool.
- Work from a range of classes and abilities is shared using the Noticeboard feature in Purple Mash. Additionally, exemplar pieces of work from individual pupils is shared with parents using Parent Portal (a feature in Purple Mash).

### **Monitoring, Evaluation and Feedback**

Monitoring standards of teaching and learning within Computing is the primary responsibility of the Computing Subject Lead. All teachers are expected to keep an online portfolio or track children's work using Purple Mash.

Details of monitoring and evaluation schedules can be found in the Computing Action Plan and School Monitoring Schedule.

Monitoring will be achieved through:

- Work scrutiny.
- Learning walks.
- Observations.
- Pupil voice.
- Teacher voice.
- Reflective teacher feedback.
- Learning environment monitoring.

- Dedicated Computing Subject Lead time.

Evaluation and Feedback will be achieved through:

- Dedicated Computing Subject Lead 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 Subject Lead, in conjunction with the SLT, in a timely manner.
- Feedback on whole school areas of development in regard to Computing to be fed back through insets/staff meetings.

### **Staff Training**

The Computing Subject Lead will assess and address staff training needs as part of the annual development plan process or in response to individual needs and requests throughout the year.

Individual teachers should attempt to continually develop their own skills and knowledge, identify their own needs and notify the subject leader.

Teachers will be encouraged to use IT and computing to produce plans, reports, communications and teaching resources.

### **Parental Involvement**

Parents are encouraged to support the implementation of IT and computing where possible by encouraging use of IT and computing skills at home for pleasure, through home-learning tasks and use of the school website. Parents will be made aware of issues surrounding Online Safety and encouraged to promote this at home.

### **Roles and Responsibilities**

Due to technology extending beyond the National Curriculum for Computing, there are key roles and responsibilities specific members of staff have.

#### **Head Teacher**

- Monitoring the implementation of the Computing Policy and its associated policies such as the Safeguarding and SEND Policies.
- Ratifying (in conjunction with the Governing Body) the Computing policy, Safeguarding policy and Computing Leader's Action Plan.
- Securing technical support service contracts and infrastructure maintenance contracts.
- Approving CPD and training which is in line with the whole school's strategic plan.
- Approving budget bids and setting them.

- Creating, in conjunction with the Computing Subject Lead, a long-term vision for Computing which includes forecasted expenditure and resources.
- Monitoring the performance of the Computing Subject Lead in respect to their specific job role description for Computing.
- Ensuring any government legislation is being met.

### **Computing Subject Lead**

- Raising the profile of Computing for all stakeholders.
- Monitoring the standards of Computing and feeding back to staff in a timely fashion so they can act on areas for development.
- Offer help and support to all members of staff (including teaching assistants) in their teaching, planning and assessment of computing.
- Provide colleagues opportunities to observe good practice in the teaching of computing.
- Ensuring assessment systems are in place for Computing.
- Maintaining overall consistency in standards of Computing across the school.
- Reporting on Computing at specific times of the year to the Governing Body/Head/Staff.
- Auditing the needs of the staff in terms of training/CPD.
- Actively supporting staff with their day-to-day practice.
- Seeking out opportunities to inspire staff in developing their practice through modelling and sharing new ideas, approaches and initiatives.
- Attending training and keeping abreast with the latest educational technology initiatives.
- Using nationally recognised standards to benchmark Computing.
- Creating action plans for Computing and supporting a long-term vision which feeds into the whole school development plan.
- Creating bids for the annual budgets and monitoring budget spend.
- Keeping an up-to-date log of all resources available to staff.
- Procuring physical and online resources that demonstrate best value.
- Reviewing the Computing curriculum and developing it as needed.
- Overseeing the effectiveness of the technician.
- Working as needed with the SENCO/Head Teacher to ensure online safety provision is above adequate and all legislation is in place.

### **Class Teacher**

- Ensure that pupils in their classes have opportunities for learning computing and using their knowledge, skills and understanding of computing across the curriculum.
- Plan and deliver the requirements of the National Curriculum for Computing to the best of their ability.
- Set high expectations for our pupils and provide opportunities for all to achieve, including girls and boys, pupils with educational special needs, pupils with

disabilities pupils from all social and cultural backgrounds, and those from diverse linguistic backgrounds.

- Ensure continued progression in learning and understanding, and create effective learning environments.
- Secure pupil motivation and engagement.
- Provide equality of opportunity using a range of teaching approaches and techniques.
- Use appropriate assessment techniques and approaches
- Set suitable targets for learning as outlined in the inclusion policy.
- Maintain up to date assessment records.

### **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 Subject Lead and Head Teacher with future infrastructure needs and associated projected costs.

### **Administration Staff**

- Maintains the school website, Facebook and Twitter content.
- Approve and moderate posts on the school social media accounts.
- Supports procurement of resources and technical services.
- Supports the technician with some data management.

### **Health and Safety (see also Health and Safety Policy)**

Green Park 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.

All fixed electrical appliances in school are tested by a Local Authority contractor every five years and all portable electrical equipment in school is tested by an external contractor every twelve months.

It is advised that staff should not bring their own electrical equipment in to school but, if this is necessary, equipment must be PAT tested before being used in school. This also

applies to any equipment brought in to school by, for example, visitors running workshops, activities, etc. and it is the responsibility of the member of staff organising the workshop, etc. to advise those people.

All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to a computer technician, bursar or head teacher who will arrange for repair or disposal.

In addition:

- Children should not put plugs into sockets or switch the sockets on.
- Trailing leads should be made safe behind the equipment
- Liquids must not be taken near the computers
- Magnets must be kept away from all equipment
- Safety guidelines in relation to IWBs will be displayed in the classrooms
- Online Safety guidelines will be set out in the Online Safety & Acceptable Use Policy

## **Security**

We take security very seriously. As such:

- The computing technician will be responsible for regularly updating anti-virus software.
- Use of IT and computing will be in line with the school's Acceptable Use Policy. All staff, volunteers and parents must sign a copy of the schools AUP.
- Parents will be made aware of the Acceptable Use Policy at school entry and should share this with their children, in an age-appropriate manner.
- All pupils and parents will be aware of the school rules for responsible use of IT and computing and the internet and will understand the consequence of any misuse.
- The agreed rules for safe and responsible use of IT and computing and the internet will be displayed in all computing areas.