Heronsgate School Computing Policy
September 2022

Review date: September 2023

Vision and Aims for Pupils:

At Heronsgate Primary School, we utilise the Kapow scheme of learning to support and inform our planning, ensuring that we meet all objectives as set out within the National Curriculum. Our overall aim with Computing is to integrate the computer into the everyday learning activities of the school. There is an interactive board in every classroom. All computers and Ipads are networked. We have four laptop trolleys, one for each year group. Below, you will find useful documents linking to our curriculum, including a guide on online safety for parents and new vocabulary children will learn within each year group.

Our Vision - "To develop and use the potential of Computing across all aspects of our School"

- Everyone in our school should be able to use a computer and other technologies with confidence and expertise
- We want Computing to improve the way we learn and teach
- We want to be able to use Computing to allow learning to take place anywhere at any time
- We want to use Computing to help improve the running of the school
- We want high quality training to be available for all staff
- We want everybody in our school to know when Computing is appropriate to use
- We want enough equipment for everyone to use, when they want to.
- We want our equipment to be well maintained, available and easy to use
- We want our pupils to have high Computing capability
- We want our school to be the centre of community learning and information
- We want our children to be able to use the digital world safely

Curriculum:

Computer Science
To enable children to become confident programmers on a range of devices.
To create opportunities for collaborative and independent learning.
To develop children's understanding of technology and how it is constantly evolving

Digital Literacy
To enable a safe computing environment through appropriate computing behaviours.
To allow children to explore a range of digital devices.
To promote pupils' spiritual, moral, social and cultural development.

Information Technology
To develop ICT as a cross-curricular tool for learning and progression.
To promote learning through the development of thinking skills.
To enable children to understand and appreciate their place in the modern world.
To ensure ICT is used, when appropriate, to improve access to learning for pupils with a diverse range of individual needs, including those with SEN and disabilities

Key Stage 2 pupils should be taught to:

- to design, write and debug 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.
- use logical reasoning to explain how some simple algorithms work 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.
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Planning and Teaching:

- It is expected that a typical lesson will provide through our planning:
- Computing through all three strands taught within the classroom.
- Continuity throughout the school to ensure that experience and skills are developed in a cohesive and consistent way.
- Access to computers, netbooks and ipads within class or in designated communal areas.
- Experience of a variety of well-planned, structured and progressive activities.
- Experience cross-curricular links to widen children's knowledge of the capability of computing including safe use of the Internet and other digital equipment.
- Opportunities for children to recognize the value of computing and ICT in their everyday lives and their future working life as active participants in a digital world. By doing this we will fulfil the requirements of the National Curriculum.

Role of the class teacher:

- Developing the student's computing capability in accordance with school policy and the requirements of the National Curriculum.
- Ensuring that each student has equality of access to computing resources.
- Ensuring that equipment is used safely and responsibly.
- Monitoring and evaluating each student's experiences.
- Developing their own knowledge and capability to support their teaching and students' learning, in working with MGL curriculum support.
- Reporting faults to technical support staff via the IT reporting procedure

Role of the subject leader:

- Liaising with the Computing Lead and Curriculum Lead to develop appropriate resources to support the subject in question.
- Ensuring that curricular Computing resources are appropriately budgeted for.
- Working with class teachers to ensure students use computing effectively in the subject in question.
- Developing their own knowledge and capability to support teaching and learning.

Assessment and Feedback:

Teachers regularly assess progress through observations and evidence. Key objectives to be assessed are taken from the National Curriculum to assess computing each term. The school uses the Kapow I can statement as a guide. Each pupil's attainment is then recorded each half term. Assessing computing is an integral part of teaching & learning and key to good practice. Assessment should be process orientated - reviewing the way that techniques and skills are applied purposefully by pupils to demonstrate their understanding of computing concepts. As assessment is part of the learning process, it is essential that pupils are closely involved. Assessment can be broken down into;

- Formative assessments are carried out during and following short focused tasks and activities. They provide pupils and teaching staff the opportunity to reflect on their learning in the context of the agreed success criteria. This feeds into planning for the next lesson or activity.

- Summative assessment should review pupils' ability and provide a best fit 'level'. Independent tasks provide a number of opportunities and scope for pupils to demonstrate their capability throughout the term. There should be an opportunity for pupil review and identification of next steps.

- Summative assessment should be recorded for all pupils – showing whether the pupils have met, exceeded or not achieved the learning objectives. We assess the children's work in computing by making informal judgments as we observe the children during lessons. Once the children complete a unit of work, we make a summary judgment of the work for each pupil as to whether they have yet to obtain, obtained or exceeded the expectations of the unit. The children's work is saved on the school server. Other work to support the judgement is sent to the Computing Seesaw account which is managed by the Computing subject lead.

Homework and Parental Engagement:

ICT can contribute to improved parental engagement by providing a convenient means for parents to access up-to-date information about their child's learning. ICT enables parents to be more engaged with their child's learning, and supports more flexible working arrangements for staff. At Heronsgate we share Marvelous Me points, parent information through both Facebook and Parent mail and online links to payments and school dinner ordering.

Inclusion and SEND:

Pupils, irrespective of gender, ability or age will be given opportunities to develop skills and understanding through a framework which provides them with:

- Pre-teaching.
- Experiences in which they can succeed.
- Tasks which are adapted.
- Resources, which ensure equal access.

For pupils who have special educational needs and/or disabilities, the Computing subject lead meets with the SENDCO to ensure and enable full access to the full curriculum offer. For example, resource review and tailoring of planning linked to specific pupils' needs. Depending upon pupils' needs, often, pupils who have SEN will need additional steps to reach ambitious objectives. SEND Funding has been used to facilitate this in many ways (e.g. the purchase of computer keyboards with enlarged keys and text so that pupils with visual impairment can access them fully). Where use of a school computer proves difficult for a child because of a disability, the school will provide specialist equipment and software to enable access.

The curriculum will be personalised through resources, tasks, responses and outcomes. Appropriate provision will be made for pupils with physical and sensory impairments using technology, alternative means of communication and multi- sensory approaches. Where necessary, extra pre-teaching will be provided at the beginning of a unit of learning to support any children with less experiences, knowledge or understanding. Children with SEND can also be given greater access to the whole curriculum using these technologies. Their motivation can be heightened and they are able to improve the accuracy and presentation of their work. This in turn can raise self-esteem.

Resources and Displays:

All classes have access to regular and whole class teaching of Computing and ICT. Teachers have access to a bank of Ipads, laptops and cameras. Every class has an interactive touch-screen board linked to a main computer on the school network.

Monitoring:

Monitoring termly enables the subject leader to gain an overview of Computing and ICT teaching and learning throughout the school. This will assist the school in the self-evaluation process identifying areas of strength as well as those for development. In monitoring the quality of Computing and ICT teaching and learning, the subject leader will:

- Observe teaching and learning in the classroom.
- Hold discussions with teachers and children.
- Analyse children's work
- Examine plans to ensure full coverage of the Computing and cross-curricular ICT requirements.

Cross curricular links:

In addition to the computing curriculum children have the opportunity to access Ipads throughout all of our subject curriculums.

Internet Safety

Internet access is planned to enrich and extend learning activities across the curriculum. However, we have acknowledged the need to ensure that all pupils are responsible and safe users of the Internet and other communication technologies both in school and outside. An Internet Access policy has thus been drawn up to protect all parties (appendix A) and rules for responsible Internet use are displayed next to each computer and in each classroom within our school. To further ensure the safety of the children we will teach each class the rights and responsibilities of using the Internet.