Bromley Hills Primary School

Computing Policy

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Draft Document to staff:	Spring 2024
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Review:	

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School Vision

At Bromley Hills, we promote a positive culture of social and emotional well-being and mental health resilience for pupils, staff, and our community. We want our children to achieve their full potential; through an inspiring and engaging curriculum, embedding our pedagogy that learning is a change to long term memory, so that they are equipped with the necessary lifelong knowledge and mental health awareness to enable them to become confident and independent valued members of our local community and British society.

School Values

Throughout our curriculum, we weave in a golden thread of core values, values which we believe are essential in preparing children for the wider world, and our young learners develop and build upon these as they go through school. Our core values are:

- Respect
- Honesty
- Cooperation
- Caring
- Teamwork

School Ethos

It's 'Time to Shine' - together we will succeed and achieve.

The UN Convention on the Rights of the Child

Article 29 - Every child has the right to an education to help them use and develop their talents and abilities.

Statement of Intent

Learning is a change to long term memory. Our aims are to ensure that our students experience a wide breadth of study based on the national curriculum and have, by the end of each key stage, long-term memory of curriculum knowledge.

We aim to equip pupils to use computational thinking and creativity to understand and change the world. Teaching will ensure that children become digitally literate. It will build on their computer science knowledge and equip them to use information technology to create programs, systems and a range of content.

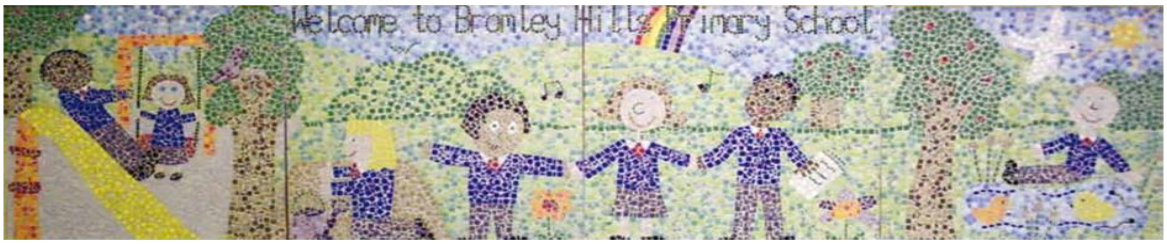
Through the continued development of oracy skills, we will expand pupil's computational vocabulary which will deepen as they progress though school. Through our computing curriculum, we intend to enable pupils to become safe, active participants in a digital world.

Implementation

Computing is taught through the 'Threshold Concepts' of computer science, information technology and digital literacy. Each threshold concept is split into knowledge categories that teachers will explore with the children. Deliberate practise of these, whereby knowledge will be revisited, will enable a gradual deepening of their understanding. Teachers utilise the National Centre For Computing Education (NCCE) Teach Computing' curriculum, which covers all areas of the computing curriculum and concepts are revisited each year, to ensure a deepening of understanding.

Impact

Because learning is a change to long term memory it is impossible to see impact in the short term. However, we do use probabilistic assessment based on deliberate practise. This means that we look at the practices taking place to determine whether they are appropriate, related to our end of key stage goals. We use comparative judgements against Milestone statements, in the tasks we set (POP tasks) and in tracking students' work over time. We use lesson observations to see if the pedagogical style matches our depth expectations.



Impact is also measured through key questioning skills built into lessons, child-led assessment against the objective (WAGBA), and summative assessments aimed at targeting next steps in learning.

Legal Framework

This policy has due regard to all relevant legislation and statutory guidance including, but not limited to, the following:

- DfE (2023) 'Keeping children safe in education 2023'
- Data Protection Act 2018
- UK General Data Protection Regulation (UK GDPR)
- Equality Act 2010
- DfE (2013) 'Computing programmes of study: key stages 1 and 2'

This policy operates in conjunction with the following school policies:

- ESafety Policy
- Anti-Radicalisation Policy
- Data Protection Policy
- Technology Acceptable Use Agreement for Pupils
- Technology Acceptable Use Agreement for Staff
- Pupil Equality, Equity, Diversity and Inclusion Policy

Roles and Responsibilities

The governing board will be responsible for:

- Monitoring the effectiveness of the Computing curriculum.
- Monitoring the progress and attainment of pupils in Computing.

- Holding the headteacher and Computing subject leader to account for pupils' Computing attainment and progress, and the delivery of the Computing curriculum.
- Ensuring the school has appropriate filtering and monitoring systems in place on its ICT system to safeguard pupils.

The Computing subject leader will be responsible for:

- Monitoring the progression of teaching and learning in Computing.
- Managing resources and advising staff on the use of materials.
- Supporting teaching staff to deliver the Computing curriculum and monitoring the quality of teaching and learning.
- Keeping abreast of technological developments and using these to inform practice.
- The Computing subject leader and headteacher will be responsible for overseeing the implementation and reviewing of this policy.

Teachers will be responsible for:

- Planning and delivering lessons in line with this policy.
- Providing equality of opportunity to all pupils through their teaching approaches and methods.
- Keeping up-to-date assessment records.
- Ensuring pupils' development of skills and knowledge progresses through their learning and understanding of Computing.
- Setting pupils appropriate targets based on their needs and prior attainment.
- Maintaining an enthusiastic approach to Computing.
- Taking part in Computing training and other CPD opportunities.

The RM technician will be responsible for:

- Maintaining and keeping ICT equipment in good working order.
- Dealing with any reports of broken, damaged or faulty equipment.
- Ensuring the school's Cyber Response and Recovery Plan is adhered to.
- Carrying out checks on all computers when necessary.
- Adjusting access rights and security privileges in the interest of the school's data, information, network and computers.
- Monitoring the computer logs on the school's network and reporting inappropriate use to the headteacher.
- Disabling the user accounts of staff and pupils who do not follow school policies, at the request of the headteacher.
- Assisting staff with authorised use of ICT facilities, if required.
- Assisting the headteacher in all matters requiring reconfiguration of security and access rights, and all matters relating to this policy.
- Accessing files and data to solve problems for a user, with their authorisation – if an investigation is required by the headteacher, authorisation from the user is not required.

Pupils will be responsible for:

- Using the school's ICT facilities appropriately.
- Being aware of the school's rules around the use of ICT equipment during lessons.
- Understanding how the use of ICT improves learning.

Parents will be responsible for encouraging ICT skills and safe ICT use at home.

Safeguarding

The school recognises the importance of teaching pupils about online safety, the potential dangers of the internet and their responsibilities when using communication technology – as set out in the school's Esafety Policy.

As part of the school's commitment to the principles outlined in the most recent version of KCSIE, the school will:

- Offer a safe online environment through filtered and monitored internet access.
- Ensure the filtering systems in place will prevent pupils from accessing terrorist and extremist materials, in accordance with the school's Online Safety Policy and the Prevent duty.
- Take care to ensure the use of filtering and monitoring does not cause "over blocking", which may lead to unreasonable restrictions on what pupils can be taught.
- Run assemblies each year about the potential dangers of the internet and how to stay safe online.
- Teach pupils about internet safety and cyberbullying during Computing lessons.

Pupils and staff who use the school's ICT facilities inappropriately will be reported to the headteacher, and the DSL where appropriate.

The governing board will ensure the school has appropriate filtering and monitoring systems in place for Computing lessons and regularly review their effectiveness. The SLT and other relevant staff will have an awareness and understanding of the provisions in place and manage them effectively and know how to escalate concerns when identified.

The ICT technician will keep internet filters and other safeguarding controls up-to-date and routinely check their effectiveness to avoid misuse and protect pupils.

Health and Safety

All electrical wires and sockets, where possible, will be kept out of the way of pupils. Visual electrical inspections will be undertaken by the ICT technician on a regular basis – any other problems will be reported immediately to the health and safety officer and ICT technician.

Pupils will be given a five-minute break if they are using the computer for more than one hour at a time.

The rules of the computer suite will be displayed around the room, and both staff and pupils will be expected to familiarise themselves with, and adhere to, these rules.

The Curriculum

Early Years Foundation Stage:

In EYFS, each classroom is fitted with an interactive board that children can access as part of their provision. Children gain confidence, control and language skills through opportunities to explore, using non-computer based resources such as BeeBots. Recording devices support children to develop their communication skills.

Key Stage 1:

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.

Key Stage 2:

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.

Planning

Planning of the Computing curriculum is tailored towards three areas of progress: Computer Science, Information Technology, and Digital Literacy.

The school creates long-term, medium-term and short-term plans for delivery of the Computing curriculum using the Teach Computing Scheme – these are as follows:

- Long-term: the topics studied across the academic year
- Medium-term: the details of work studied each term
- Short-term: the details of work studied during each lesson

The subject leader is responsible for reviewing and updating long-term and medium-term plans, and communicating these to teachers.

Teachers are responsible for reviewing and updating short-term plans, building on the medium-term plans, taking into account pupils' needs and identifying the methods in which topics could be taught. Teachers will utilise the Teach Computing Scheme.

All relevant staff members are briefed on the school's planning procedures as part of their staff training.

All lessons will have clear learning objectives (WAGBAs), which are shared and reviewed with pupils.

Assessment and Reporting

Pupils will be assessed and their progression recorded in line with the school's Assessment Policy.

EYFS: Technology is no longer an assessed area of learning in EYFS.

Years 1 – 6: Formative assessment, which is carried out informally throughout the year, will enable teachers to identify pupils' understanding of subjects and inform their immediate lesson planning. This is completed through questioning, discussing work with the pupil, observations and POP tasks. Teachers will use this information to inform a summative assessment at the end of each term. Assessments are inputted into the online system, O Track, and the Deputy Headteacher collates the results and distributes overviews to the subject leader.

Equal Opportunities

All pupils will be provided with equal learning opportunities regardless of their background or characteristics, in line with the school's Pupil Equality, Equity, Diversity and Inclusion Policy.

To ensure pupils with SEND can achieve to the best of their ability, targets for pupils with SEND will be adapted and the delivery of the curriculum will be differentiated for these pupils.

The curriculum and targets will also be adapted for other pupils based on their needs, e.g. pupils with EAL.

Where possible, ICT will be used in a specialist way to support pupils with SEND. The school will look to utilise software systems that can be modified to aid language, spelling or reading development.

The school will aim to maximise the use and benefits of ICT as one of many resources to enable all pupils to achieve their full potential.

Resources

Children have access to desktop computers and iPads in school. Every classroom from nursery to Year 6 has at least 1 work station connected to the school network and an interactive board with sound and internet facilities.

. Each class from Year 1 – Year 6 has an allocated slot across the week for the teaching of specific Computing skills. They are also available for cross-curricular use. Each phase has an allocation of iPads to enhance the children's learning.. Computers around the school are networked and have Internet access. The school has an ICT and computing technician from RM who is in school one a fortnight to support the maintenance of our Computing equipment.

Online resources for home use

We have bought into the following to give pupils safe access to online education opportunities outside of school. These are:

- Times Tables Rockstars
- Lexia
- MyMaths

Pupils have passwords that can be used to access these sites. Pupils have been shown how to use them and and are reminded to keep their passwords safe from others.

Monitoring and Review

This policy is reviewed annually by the headteacher and the subject leader. Any changes to this policy will be communicated to all relevant staff members.