



SketchleyHill
Primary School

COMPUTING POLICY

<i>Review Programme</i>	
Policy adopted:	Summer 2023
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Computing Lead	Hannah Robinson
Signed – Headteacher:	

Computing Policy



INTENT

At Sketchley Hill Primary School we understand that a high-quality computing education is essential for pupils to understand modern information and communication technologies (ICT), and for them to use these skills to become responsible, competent, confident and creative participants of an increasingly digital world.

Throughout this policy, we outline how we, as a school, will deliver the requirements of the Key Stage 1 (KS1) and Key Stage 2 (KS2) computing programmes of study, and to ensure that our pupils have the digital skills they need.

At Sketchley Hill we aim to:

Foster and develop a hunger and curiosity for life-long learning and enthusiasm for knowledge about computing and using technology.

- a) Children are enthusiastic about computing and using technology
- b) Children ask questions and want to know more about how to use technology
- c) Pupils have a strong basis of knowledge on how to use technology and stay safe online

We equip our pupils with the knowledge and skills that they need to use technology in life.

- a) Pupils have the relevant knowledge for secondary school transition
- b) Pupils have the skills they need for secondary school

We develop the personal character and attributes of our young people so that they are confident and safe citizens of the future when using technology.

- a) Pupils need to have the knowledge about staying safe online
- b) Pupils understand challenges they may face as young people and how to manage them
- c) Pupils understand the positive impact of technology
- d) Pupils have strong inter-personal skills so that they can manage themselves and others confidently
- e) Pupils understand what it means to be a good citizen of the United Kingdom

Enrich lives through a variety of experiences so that they can make informed choices for their own future interest.

- a) Every pupil will have enjoyed a planned programme of experiences
- b) Every child has the opportunity to follow their interests in computing and using technology

A curriculum that is relevant and meaningful to young people that are growing up in Burbage today.

- a) Pupils have pride and a sense of identify being from Burbage
- b) Links are made with external providers to promote e-safety in the community

Computing

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming.

Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

National Curriculum

The 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

Legal framework

This policy is in regard to and compliant with the following statutory guidance:

- DfE (2013) 'Computing programmes of study: Key Stages 1 and 2'

This policy links in with the following other school policies:

- E-safety Policy

Roles and responsibilities

The headteacher will:

- Ensure that there is a Primary Computing Policy in place, and that it is regularly reviewed and updated to take into account new developments, both to the primary computing curriculum and to ICT.
- Ensure that the Primary Computing Policy, as written, is disseminated to the computing coordinator, teaching staff and parents, for implementation.

- Hold the computing coordinator to account for the effective implementation of the Primary Computing Policy, including budget expenditure.
- Intervene where it is apparent that the Primary Computing Policy is not being implemented according to its provisions.

The computing coordinator will:

- Manage the computing budget, and keep appropriate records of expenditure in order to review them and make suggestions for the future.
- Secure and maintain computing resources, and advise staff on the correct use of digital technologies.
- Offer help and support to all members of staff in their planning, teaching and assessment of computing.
- Keep the headteacher and other stakeholders, such as parents, informed about our Sketchley Hill implementation of the primary computing curriculum.
- Keep up-to-date with new developments in computing and communicate such information and developments to colleagues, including, where necessary, through the creation and delivery of bespoke training programmes.
- Attend appropriate in-service training.

Teachers will:

- Plan and deliver the requirements of the KS1 and KS2 computing programmes of study to the best of their abilities, using the scheme of work set by the school.
- Set high expectations for all their pupils, including pupils with special educational needs and/or disabilities (SEND), pupils from various social, cultural and linguistic backgrounds, and academically more able pupils.
- Encourage pupils to apply their knowledge, skills and understanding of computers and ICT across the curriculum.
- Maintain up-to-date records of both formative and summative assessments.
- Tailor lesson delivery according to pupils' respective abilities.

Role of Middle Leader

- Responsible for the coordination of STEM subjects including Science, Computing and D&T.
- Middle leader provides support and guidance to the above subject leaders.

Early Years Foundation Stage (EYFS)

Although computing is not a statutory part of the EYFS, we will ensure that children of reception age receive a broad, play-based experience of computing through the use of new technologies.

Key Stage 1

Pupils will be taught to:

- Understand what algorithms are, and how they are implemented.
- Create and debug simple programs.
- Predict the behaviour of simple programs.

- Create, organise, store, manipulate and retrieve digital content.
- Recognise common uses of ICT beyond school.
- Use technology safely and respectfully, keeping personal information private, and to identify where to go for help and support when they have concerns online.

Key Stage 2

Pupils will be taught to:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems, and solving problems.
- Use sequence, selection, and repetition in programs.
- Work with variables and various forms of input and output.
- Explain how some simple algorithms work, and how they can detect and correct errors.
- Understand computer networks, how they can provide multiple services, and the opportunities they offer for communication and collaboration.
- Use search technologies, understand how results are selected and ranked, and be able to critically evaluate digital content.
- Select, use and combine a variety of software on a range of devices to design and create programs, systems and content that accomplish specific goals.
- Use technology safely, respectfully and responsibly, recognise acceptable behaviour and identify a range of ways to report online concerns.

Curriculum delivery

Each class teacher will be responsible for the delivery of Computing to their class, whether directly or delegated to an appropriate teacher. The Computing Leader should be consulted for advice on teaching, learning, assessment, marking and recording and the availability of resources.

The Long Term Planning identifies areas of study across the key stages and follows the sequence of learning objectives set out in the new National Curriculum (2014).

The Scheme of Work (Kapow) outlines skills, knowledge and resources in year groups and provides a sequence of learning. It provides a spiral curriculum where children are revisiting and building on prior skills and learning. Teachers need to ensure their class are meeting the learning outcomes by either following the scheme of work or by planning their own content that meets the same outcomes.

Computing will take place -

- As a classroom activity in its own right.
- As a means of supporting other curricular work in the classroom.
- Within the Computer Suite with a focus on developing skills, knowledge and capability.
- In and around the school where appropriate (as a means to enhance learning).

Teachers will organise their teaching and classroom environment to ensure that children work as a whole class, in small groups, in pairs and as individuals, as appropriate to learning objectives.

Each class has a timetabled period in the Computer Suite. Also, each year group has opportunities to use the laptops or android tablets for Numeracy, Science, Literacy, R.E. or Topic related activities. (A trolley is located in the Year 3/4 Double Decker and Year 5/6 mobiles. Each year group has been given a iPad.)

Additionally, each classroom has a desktop and an Interactive Whiteboard to be used in conjunction with any appropriate activity.

The use of these resources will ensure that children receive their entitlement in Computing and pursue its use in cross curricular activities.

Resources

The school has the following I.C.T. equipment:

- 18 computers in a purpose built suite with printing, Internet connection and standard curriculum software.
- Two laptop trolleys with 16 laptops in – one situated in Y3/4 Double Decker and one for Y5/6.
- One Interactive Whiteboard in each classroom.
- Each teacher has a desktop computer.
- 1 computer in Library for Library research.
- Programmable computer vehicles such as Roamer and BeeBots.
- C.D. players.
- A set of class android tablets (secured in the charging trolley in the Suite as well as in the Double Decker)
- Data leads (light, sound and temperature loggers).
- Digital Microscopes.
- Listening centres.
- Visualisers.

Differentiation

Suitable learning opportunities are provided for all pupils by matching the challenge of the task to the individual needs and abilities of each pupil. This will be achieved in a variety of ways, including:

- Setting different tasks when necessary for each ability group.
- Making reasonable adjustments to the way in which the computing curriculum is delivered, such as providing transcripts of online learning videos to pupils with hearing impairments, or making resources available in a pupil's first language where they use English is used as an additional language.
- Assigning classroom assistants to individual/groups of pupils, where appropriate, to enable greater one-to-one support.
- Academically more able pupils may be asked to become 'digital leaders', mentoring and sharing their skills during lessons.

Assessment

Pupils' knowledge and understanding of the primary computing curriculum will be assessed according to the provisions outlined in our school's assessment policy. Ongoing formative assessment monitors pupil performance and progress during learning; the outcomes of which we will use to ensure that work matches the individual needs and abilities of pupils. Samples of work will be kept for groups of children, stored in both class books and on the school network, within relevant class and pupil folders.

Impact

The impact of our curriculum will be identified through the following:

Foster and develop a hunger and curiosity for life-long learning and enthusiasm for knowledge about computing and using technology.

- Pupils attitudes to learning and good or better in all observed lessons.
- Pupil surveys demonstrate a high level of enthusiasm
- Children ask relevant, intelligent questions in at least 80% of observed lessons.
- Evidence that children in the school are using a range of technology

We equip our pupils with the knowledge and skills that they need to use technology in life.

- Spiral curriculum is delivered throughout a child's time at school to build on learning.
- Secondary school confirms that children were well prepared for the KS3 curriculum
- b2) At least 80% of pupils by Year 6 meet our standard of expected core knowledge

We develop the personal character and attributes of our young people so that they are confident and safe citizens of the future when using technology.

- By the end of Year 6, at least 80% of pupils have our agreed essential knowledge on staying safe online
- Pupils can explain key risks and how they would be managed
- In discussion, Year 6 pupils can explain why technology is a important for everyday life
- Pupils understand British values and explain what it means to be an active citizen

Enrich lives through a variety of experiences so that they can make informed choices for their own future interest.

- We will have a planned programme that will be completed by all pupils
- Computing club will be put on by the school to allow children to follow their interests

A curriculum that is relevant and meaningful to young people that are growing up in Burbage today.

- Planned activities across the curriculum to develop pupils awareness of Burbage and our involvement in technology
- Pupils explain what they like about being from Burbage and why it's important to them

Staff training

The computing coordinator will be responsible for the identification and delivery of staff training requirements.

Staff training requirements will be met by:

- Auditing staff skills and confidence in the use of computers and Computing on a yearly basis.
- Arranging top-up training for individual staff members as required.

The computing coordinator will remain up-to-date with the latest developments in computing through subscriptions to relevant journals, attendance at relevant courses, etc., and will pass on any newly acquired knowledge/skills to staff members, where appropriate.

Health and Safety

At all times, pupils will be supervised when using any computing equipment by an adult. Children should not plug in computers. The teacher has responsibility for plugging into sockets and making a visual safety check on the equipment. Children must be taught the correct procedures for running programs and for closing down to prevent accidental damage. Equipment will be checked as part of the Health and Safety Policy for electrical equipment. Computing equipment/resources should be regularly inspected for damage and discarded if found to be cracked.

E-Safety

There is an additional e-safety policy which outlines the importance of staff and pupils using I.C.T. safely within the school. Teaching of E-Safety forms part of the Medium Term Plans and Kapow scheme of work.

Liaison with other schools/outside agencies

The school should look towards developing links with institutions or individuals who have I.C.T. expertise. The School link with Gateway Learning Alliance and the Burbar Group of schools enables the Computing Leader to meet with colleagues to keep up to date with Computing information.

- Primary World.
- Locally run courses for Computing.

Monitoring and evaluation

Sketchley Hill Primary School appreciates that computers and ICT are rapidly developing, with new uses and technology being created all the time. School will review this policy on a bi-annual basis in line with the Sketchley Hill policy review schedule. School review its web filters on an annual basis in order to ensure that pupils continue to be protected from inappropriate content online.