Marsh Green Primary School

Computing Policy

Contents:

Statement of intent

At Marsh Green 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. We aim to inspire pupils to continue to learn and apply the skills they learn at secondary school, university, and beyond in the workplace.

Signed by:

_____ Headteacher   Date: _____

_____ Chair of governors   Date: _____

1.   Legal framework

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

- DfE (2013) 'Computing programmes of study: key stages 1 and 2'

1.2.   This policy links in with the following other school policies:

- ICT Policy
- Maths Policy
- Social Media Policy
- Digital Safeguarding Policy

2.   Roles and responsibilities

2.1.   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 Computing Policy, as written, is disseminated to the computing coordinator, teaching staff and parents, for implementation.
- Hold the computing coordinator and computing support to account for the effective implementation of the Primary Computing Policy, including budget expenditure.
- Intervene where it is apparent that the Computing Policy is not being implemented according to its provisions.

2.2.   The computing coordinator and computing support 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 school's 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.
- Offer appropriate training where needed to staff, parents and children.

2.3.   Teachers will:

- Plan and deliver the requirements of the KS1 and KS2 computing programmes of study to the best of their abilities.
- 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 assessment.
- Tailor lesson delivery according to pupils' respective abilities.

3.   Early years foundation stage (EYFS)

3.1.   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. A wide range of resources are readily available, such as:

- Beebots
- Radio controlled cars
- Ipads
- Tuff cam video recorders
- Kidi Zoom cameras
- Headphones and microphones for use with in class music devices
- Interactive whiteboards
- Laptops

4.   Key stage 1

4.1.   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.

5.   Key stage 2

5.1.   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.

6. Curriculum delivery

6.1. Teaching of digital literacy and ICT is largely delivered through cross-curricular subject links.

6.2. The core requirements of the KS1 and KS2 computing programmes of study, such as coding/programming, will be delivered through the Purple Mash scheme of work, during a dedicated weekly computer lesson.

6.3. We have acquired 10 desktop computers, 30 laptops, 30 netbooks, 60 Ipads, as well as 18 Beebots, a class pack of Lego Wedo and a class set of headphones and microphones to support the delivery of the primary computing curriculum. A whole school license for Purple Mash, Espresso, On-screen Beebot, The Bridge, MinecraftEdu and Microsoft Office were also purchased.

6.4. An audit of resources is taken on an annual basis to ensure that our computing provision remains appropriate to the latest requirements of the KS1 and KS2 primary computing programmes of study.

6.5. Web filters are kept up-to-date in order to ensure that pupils don't access inappropriate materials.

6.6. Obsolete or broken machines are sold, repaired or, where repair is not possible or cost-effective, scrapped in accordance with data protection requirements.

6.7. A service level agreement (SLA) with Kieran Johnson at MAD4IT is in place to support the computing coordinators to fulfil this role.

6.8. An SLA with Agilysis is in place, and all computing-related devices and related applications have access to the internet. This SLA will be reviewed on April 2018 to ensure that the current package remains sufficient for purpose, and that it continues to represent the best value for money.

7. Differentiation

7.1. We provide suitable learning opportunities for all pupils by matching the challenge of the task to the individual needs and abilities of each pupil. We will achieve this in a variety of ways, including:

- Grouping pupils by ability and setting different tasks for each ability group.
- Making reasonable adjustments to the way in which we deliver the computing curriculum, 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 as an additional language.
- Assigning classroom assistants to individual/groups of pupils, where appropriate, to enable greater one-to-one support.
- Providing extra learning opportunities through; after school, lunchtime and breakfast clubs.
- Access codes to Purple Mash will be given to all pupils, enabling them to access Purple Mash at home.

7.2. Academically more able pupils may be asked to become 'digital leaders', mentoring and sharing their skills with others, during computer lessons and through in-school clubs.

8. Assessment

8.1. Pupils' knowledge and understanding of the primary computing curriculum will be assessed according to the provisions outlined in our school's Assessment Policy.

8.2. 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.

8.3. Summative assessment reviews pupils' progress and abilities, and will be undertaken at the end of each unit, term and school year via a number of means, including but not limited to:

- End of unit tests.
- Portfolios.
- End of year tests.
- KS1 and KS2 national curriculum tests.

8.4. Samples of work will be kept for groups of children, stored in both classrooms and on the school network, within relevant class and pupil folders.

9. Staff training

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

9.2. Staff training requirements will be met by:

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

9.3. 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.

10. After-school clubs

10.1. All pupils have the opportunity to develop their programming and coding skills through our after school club, where they are provided with the opportunity to work Scratch, Purple Mash and MinecraftEdu.

10.2. Pupils will develop their online skills through accessing The Bridge in after school, lunch and breakfast clubs.

11. Monitoring and evaluation

11.1. We appreciate that computers and ICT are rapidly developing, with new uses and technology being created all the time.

11.2. We will review this policy on an annual basis in line with our school's policy review schedule.

11.3. We will review our web filters on an annual basis in order to ensure that pupils continue to be protected from inappropriate content online.