COMPUTING POLICY

September 2023

"To go further than we thought
To run faster than we hoped
To reach higher than we dreamed
To become the best we are able to be."

Our Vision Statement

At Helmshore Primary School we aim to provide an enjoyable and stimulating learning environment, enabling children to reach their full potential through the development of a desire for lifelong learning. We have a clear, shared vision of Computing throughout the school where staff, governors, parents and children work together in partnership. We aim to offer a range of high quality, appropriate computing resources to enhance and enrich teaching and learning across the curriculum, providing equal access to all.

We want the children and staff to become enthusiastic and independent users of technology. We aim to equip all children with the computing skills knowledge required for their next key stage, and the confidence to share their Computing learning experiences with their parents and carers outside school.

We also want to create an environment where Computing is regarded as an integral part of our everyday practices and administration management, ensuring that staffs are competent and confident in the use of Computing.

We believe Computing prepares pupils to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technology. We aim to keep abreast of advances in technology to prepare our students for the twenty first century.

Pupils learn how to employ Computing to enable rapid access to ideas and experiences from a wide range of people, communities and cultures. Increased capability in the use of Computing promotes initiative and independent learning, with pupils being able to make

informed judgements about when and where to use Computing to best effect, and to consider its implications for home and work both now and in the future.

Parents should benefit in the future from speedier access to details on their children's progress and attendance in school. Via our website and Twitter Feed, parents and carers will have opportunities to participate in their child's education and be kept fully up to date with school affairs. Staff will be supported by administrative computing to give a more efficient access to information provided by an increased store of data. All staff will be competent in the use of computing and its potential for raising standards and developing independent learners will be fully understood.

Communication with Governors will be enhanced via school e-mail, the school website and Groupcall. Governors understand the potential of Computing for raising standards and developing independent learners.

The appropriate use of Computing develops our school's high quality teaching and learning, administration and management.

Aims and objectives

Computing is changing the lives of everyone. Through teaching Computing we equip children to participate in a rapidly-changing world where work and leisure activities are increasingly transformed by technology. We enable them to find, explore, analyse, exchange and present information. We also focus on developing the skills necessary for children to be able to use information in a discriminating and effective way. Computing skills are a major factor in enabling children to be confident, creative and independent learners.

The aims of Computing are to enable children:

- to develop Computing capability in finding, selecting and using information;
- to use Computing for effective and appropriate communication;
- to monitor and control events both real and imaginary;
- to apply hardware and software to creative and appropriate uses of information;
- to apply their Computing skills and knowledge to their learning in other areas;
- to use their Computing skills to develop their language and communication skills;
- to explore their attitudes towards computing and its value to them and society in general. For example, to learn about issues of security, confidentiality and accuracy.

Teaching and learning style

As the aims of computing are to equip children with the skills necessary to use technology to become independent learners, the teaching style that we adopt is as active and practical as possible. While at times we do give children direct instruction on how to use hardware or software, the main emphasis of our teaching in computing is for individuals or groups of children to use computers to help them in whatever they are trying to study. So, for example, children might research a history topic by using programs, or they might investigate a particular issue on the Internet. Children who are learning science might use the computer to model a problem or to analyse data. We encourage the children to explore

ways in which the use of computing can improve their results, for example, how a piece of writing can be edited or how the presentation of a piece of work can be improved by moving text about etc.

We recognise that all classes have children with widely differing computing abilities. This is especially true when some children have access to computing equipment at home, while others do not. We provide suitable learning opportunities for all children by matching the challenge of the task to the ability and experience of the child. We achieve this in a variety of ways, by:

- setting common tasks which are open-ended and can have a variety of responses;
- setting tasks of increasing difficulty (not all children complete all tasks);
- grouping children by ability in the room and setting different tasks for each ability group;
- providing resources of different complexity that are matched to the ability of the child;
- using classroom assistants to support the work of individual children or groups of children.

Computing curriculum planning

The school uses iCompute as the basis for its curriculum planning. We have adapted the national scheme to the local circumstances of the school.

We carry out the curriculum planning in computing in three phases (long-term, medium-term and short-term). The long-term plan maps the computing topics that the children study in each term during each key stage. The computing subject leader works this out in conjunction with teaching colleagues in each year group, and the children often study computing as part of their work in other subject areas. Our long-term computing plan shows how teaching units are distributed across the year groups, and how these fit together to ensure progression within the curriculum plan.

Our medium-term plans, which we have adopted from the iCompute scheme of work, give details of each unit of work for each term. They identify the key learning objectives for each unit of work and stipulate the curriculum time that we devote to it. The Computing subject leader is responsible for keeping and reviewing these plans. In this way we ensure that we cover the National Curriculum without repeating topics.

The class teacher is responsible for adapting the short-term plans with the computing component of each lesson. These daily plans list the specific learning objectives of each lesson. The class teacher keeps these individual plans and s/he and the computing subject leader often discuss them on an informal basis.

The topics studied in computing are planned to build upon prior learning. While we offer opportunities for children of all abilities to develop their skills and knowledge in each unit, we also build planned progression into the scheme of work, so that the children are increasingly challenged as they move up through the school.

Early Years Foundation Stage

We teach computing in Reception classes as an integral part of the topic work covered during the year. We relate the computing aspects of the children's work to the objectives set out in the Early Learning Goals (ELGs) which underpin the curriculum planning. The children are encouraged to develop interest in and awareness of the uses of technology. They look at the similarities and differences between the past and now (this can include looking at how technology as changed). They also have a range of opportunities to use Computing equipment including computers, a digital camera and programmable toys. During the year they gain confidence and start using the computer to find information and use it to communicate in a variety of ways. Purple Mash is used to enhance and support learning throughout the year.

The contribution of Computing to teaching in other curriculum areas

Computing contributes to teaching and learning in all curriculum areas. For example, graphics work links in closely with work in art, and work using databases supports work in mathematics, while programs and the Internet prove very useful for research in humanities subjects. Computing enables children to present their information and conclusions in the most appropriate way.

English

Computing is a major contributor to the teaching of English. Through the development of keyboard skills and the use of computers, children learn how to edit, revise and redraft text. They have the opportunity to develop their writing skills by communicating with people over the Internet, and they are able to join in discussions with other children throughout the world through the medium of video conferencing. They learn how to improve the presentation of their work by using desk-top publishing software.

Mathematics

Many computing activities build upon the mathematical skills of the children. Children use computing in mathematics to collect data, make predictions, analyse results, and present information graphically. They also acquire measuring techniques involving positive and negative numbers, and including decimal places.

Personal, social and health education (PSHE) and citizenship

Computing makes a contribution to the teaching of PSHE and citizenship as children learn to work together in a collaborative manner. They develop a sense of global citizenship by using the Internet and e-mail. Through the discussion of moral issues related to electronic communication, children develop a view about the use and misuse of computing, and they also gain a knowledge and understanding of the interdependence of people around the world.

Teaching computing to children with special needs

At Helmshore Primary School we teach computing to all children, whatever their ability. Computing forms part of our school curriculum policy to provide a broad and balanced education for all children. We provide learning opportunities that are matched to the needs of children with learning difficulties. In some instances the use of computing has a considerable impact on the quality of work that children produce; it increases their confidence and motivation. When planning work in computing, we take into account the targets in the children's Individual Provision Map (IPM).

Assessment and Recording

Teachers assess children's work in computing by making informal judgements as they observe them during lessons. On completion of a piece of work, the teacher marks it and comments as necessary (when a hard copy record is made). At the end of a unit of work s/he makes a summary judgement about the work of each pupil in relation to age related attainment, and records these attainment grades.

The Computing subject leader keeps samples of the children's work in a digital portfolio (keeping hard copies where appropriate). This demonstrates the expected attainment in Computing for each age group in the school.

Resources

All of our classrooms are equipped with Interactive Screens; these systems can also connect to iPads. The school hall is equipped with a presentation system including a PC, projected image, mixing desk, CD/MP3 player, wireless microphones, iPod docking station. Our school has computers available in every classroom, in addition to three fully equipped mobile Computer Suites (EFYS/KS1, Lower KS2 & Upper KS2). There are computers in supplementary teaching areas. We have mobile devices, iPads and Netbooks, linked to the server via Wi-Fi across all areas of school. Our network provides access to licence controlled software, personally allocated memory space, shared memory space for pupils, shared memory space of staff, secure memory space for administration purposes, and security filtered internet access. We keep original software discs in a central store; however network security measures ensure that only licensed software is used.

Along with the computers, the school has the following:

Hardware
- networked colour printers;
- scanner;
- digital cameras allocated to classes;
- telephoto digital camera;
- video camera (DVD);
- video player/recorder;
- electronic keyboards;
- calculators;

- robots (Busy Bees);
- microbits (class set)
- interactive screens in all classrooms;
- iPads (KS2 Year Group sets and a KS1 have 40+ devices)
- iPods
- computer microscopes;
- photocopier printer;
- staff laptops;
- pupil laptops;
- netbooks;
- CCTV magnifiers;
- webcams;
- CD players;
- television;
- large presentation screen (School Hall)

Software

- Purple Mash (Part of the 2Simple Collection) – used to support the curriculum e.g. supporting home learning, enhance lessons, support homework tasks
- Microsoft Office Package including – Word, Excel, PowerPoint, Publisher, Outlook, InfoPath, Access.
- 2Simple Collection including - a word processing package; painting/drawing software; clip art; a music composition package; a multimedia programme; spreadsheets/database programmes; control programme; simulations.
- ActivInspire software to support interactive screen presentations.
- Curriculum topic based software from specialist providers and government organisations.
- This list is not exhaustive as new software is continually being sought and reviewed by the Computing subject leader and subject leaders throughout all curriculum areas.

Monitoring and review

This policy will be reviewed in September 2024. The monitoring of the standards of the children's work and of the quality of teaching in Computing is the responsibility of the Computing subject leader. The Computing subject leader is also responsible for supporting colleagues in the teaching of Computing, for keeping informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school. The Computing subject leader gives the headteacher an annual summary report in which s/he evaluates the strengths and weaknesses in the subject and indicates areas for further improvement. The Computing subject leader has specially-allocated time for carrying out the vital task of reviewing samples of the children's work and for visiting classes to observe the teaching of Computing.

Equal Opportunities

It is the responsibility of all teachers at Helmshore Primary School to ensure that children irrespective of ability, race, gender, age, faith, sexual orientation, and disability are given full access to the computing curriculum and make the greatest possible progress in accordance with recent legislation. Please refer to the schools Equal Opportunities Policy.

Signed …………………………………………………………………………………. Headteacher

Signed …………………………………………………………………………………. Chair of Governors

Date: September 2023