# Bishop Wood Junior School Computing Policy

## Vision Statement: 'to enhance use of Computing across the curriculum to accelerate progress of all children and to prepare them for future Computing learning.'

### 1 Aims

**1.1** Computing has become part of the way we all work and entertain ourselves. Almost everything we do at school now involves the use of Computing and ICT:

- online lesson research, teaching plans and resource materials;
- lesson delivery via either overhead projector or interactive whiteboard;
- communication by e-mail and fax;
- document distribution and storage;
- assessment information analysis;
- production and editing of reports.

**1.2** Through teaching Computing we equip children to participate in a world of rapidly-changing technology. We enable them to find, explore, analyse, exchange and present information. We also help them develop the necessary skills for using information in a discriminating and effective way. This is a major part of enabling children to be confident, creative and independent learners.

**1.3** The objectives of teaching 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 their Computing skills and knowledge to their learning in other areas;
- to explore their attitudes towards Computing and its value to them and society in general. For example, to learn about issues of security and personal safety, confidentiality and accuracy.

### 2 Teaching and learning style

**2.1** The objective of teaching of Computing is to equip children with the technological skill 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 progress in whatever they are studying. So, for example, they might investigate a particular issue on the Internet.

**2.2** We recognise that all classes have children with a wide range of 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:

- setting 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.

## 3 Computing curriculum planning

**3.1** The school uses the HfL scheme of work for Computing as the basis for its curriculum planning. We have adapted the scheme to the local circumstances of the school.

**3.2** 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 year. The Computing subject leader devises this 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.

**3.3** Our medium-term plans, which we have adopted from the scheme of work, give details of each unit of work for each term. Each unit consists of skills based learning followed by an independent task. Each unit contains an eSafety focus. 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.

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

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

**3.6** Parents are required to give signed authorisation before their child can use the Internet, either in guided or in independent school work. The parents are however assured that their child's use of the Internet at school is always supervised.

## 4. The contribution of Computing to teaching in other curriculum areas

**4.1** The teaching of Computing contributes to teaching and learning in all curriculum areas. It also offers ways of impacting on learning which are not possible with conventional methods. Teachers use software to present information visually, dynamically and interactively, so that children understand concepts more quickly. For example, graphics work links in closely with work in art, and work using databases supports work in mathematics. Computing enables children to present their information and conclusions in the most appropriate way. Quite a lot of software is generic, and can therefore be used in several curriculum areas.

### 4.2 English

Computing is a major contributor to the teaching of English. As the children develop mouse and keyboard skills, they learn how to edit and revise text on a computer. They have the opportunity to develop their writing skills by communicating with people via e-mail. They also learn how to improve the presentation of their work by using desktop publishing software. There is in addition a variety of software which targets specific reading, grammar and spelling skills.

### 4.3 Mathematics
Children use Computing in mathematics to collect data, make predictions, analyse results, and present information graphically. Screen robots allow pupils to give exact instructions for a particular route, or to use their knowledge of angles to draw a range of polygons.

### 4.4 Science
Software is used to animate and model scientific concepts, and to allow children to investigate processes which it would be impracticable to do directly in the classroom. Data loggers are used to assist in the collection of data and in producing tables and graphs.

### 4.5 Personal, social and health education (PSHE) and citizenship
Computing makes a contribution to the teaching of PSHE and citizenship in that children in Computing and ICT classes learn to work together in a collaborative manner. They also develop a sense of global citizenship by using the Internet and e-mail. Through discussion of safety and other issues related to electronic communication, the children develop their own view about the use and misuse of ICT, and they also gain an insight into the interdependence of Computer users around the world.

## 5 Computing and inclusion

**5.1** At our school we teach Computing to all children, whatever their ability and individual needs. Computing forms part of the school curriculum policy to provide a broad and balanced education to all children. Through our Computing teaching we provide learning opportunities that enable all pupils to make good progress. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talents, and those learning English as an additional language, and we take all reasonable steps to achieve this. For further details see separate policies: Special Educational Needs; Disability Non-Discrimination and Access; Gifted and Talented.

**5.2** When progress falls significantly outside the expected range, the child may have special educational needs. Our assessment process looks at a range of factors – classroom organisation, teaching materials, teaching style, differentiation – so that we can take some additional or different action to enable the child to learn more effectively (for example, a lot of software can be differently configured for different ability ranges). Assessment against the National Curriculum allows us to consider each child's attainment and progress against expected levels. This ensures that our teaching is matched to the child's needs.

**5.3** Intervention through provision mapping for children with special educational needs. The provision map may include, as appropriate, specific targets relating to computing. In some instances the use of Computing has a considerable impact on the quality of work that children produce, by increasing their confidence and motivation.

**5.4** We enable pupils to have access to the full range of activities involved in learning computing. We have a range of software which is designed to include all learners. Our hardware can accept a range of input devices catering to pupils with specific difficulties. Where children are to participate in activities outside the classroom, we carry out a risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

## 6 Assessment for learning

**6.1** Teachers will assess children's work in Computing by making informal judgements during lessons. On completion of a piece of work, the teacher assesses the work, and uses this assessment to plan for future learning. Children are encouraged to make judgements about how they can improve their own work.

**6.2** The samples of the children's work are stored on the server. This demonstrates the expected level of achievement in Computing for each age group in the school.

**6.3** Assessment statements for each unit are used from the HfL scheme of work.

## 7 Resources

**7.1** Our school has the appropriate computer-to-pupil ratio, and Internet access. Most software is readily available to the whole school community via the server.

**7.2** We employ a technician to keep our equipment in good working order. Members of staff report faults in the book provided for that purpose in the staff room. The technician will also set up new equipment, and install software and peripherals.

**7.3** In order to keep our school computers virus-free, no software from home will be installed on school computers. Pupils bringing in work on portable storage disks must first have it scanned, but it is easier if the work is e-mailed to the teacher concerned. Where teachers are transferring files between their home and school, they must have up-to-date virus protection software on their home computers.

**7.5** Along with desktop and laptop computers, the school has the following:

**Hardware**

- network, including switch, router and server PC;
- network shared resources, including printers;
- interactive whiteboard and screen projection equipment;
- digital microscopes;
- DVD and video players;
- calculators;
- floor robot;
- headphones and microphones;
- overhead projector;
- USB drives for portable storage;
- keyboards (musical).

**Software**

- word-processing and desktop-publishing programs;
- painting and drawing software;
- music composition package;
- multimedia presentation program;
- spreadsheet and database programs;
- control program and models;
- simulations;
- encyclopaedia reference material;
- virus protection.
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**Online material**

- online content subscriptions;
- school website and intranet;
- school e-mail accounts.

## 8 Monitoring and review

**8.1** The monitoring of the standards of the children's work and of the quality of teaching in Computing is the responsibility of the subject leader. The Computing subject leader is also responsible for supporting colleagues in their teaching of computing, for keeping informed about current developments in the subject, and for providing a strategic lead and direction for Computing in the school. The subject leader gives the head teacher regular summary reports in which s/he evaluates the strengths and weaknesses in the subject, and indicates areas for further improvement. The subject leader has specially-allocated time for carrying out the vital tasks of reviewing samples of the children's work, and of visiting classes to observe the teaching of computing.

**8.2** This policy will be reviewed in line with the Governors' Policy Review Schedule