Broomhill Infant School

Policy on Computing

1 Aims and objectives

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

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

Thus, 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 to develop the necessary skills for using information, which is a major part of enabling children to be confident, creative and independent learners.

1.2 **The new national curriculum for computing aims to ensure that all pupils**

- Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication.
- 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.

2 Teaching and learning style

2.1 An objective of teaching 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 to progress in whatever they are studying.

2.2 We recognise that all classes have children with a 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.

3 Computing curriculum planning

3.1 Computing is a core subject in the National Curriculum. The school uses a scheme of work for Computing called 'Teach Computing' as the basis for curriculum planning. Teachers adapt the scheme to the local circumstances of the school as they use it.

3.2 The areas 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 school.

3.3 Parents are required to give signed authorisation before their child can use the Internet. The parents are, however, assured that their child's use of the Internet at school is always

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supervised with Parental Filters in place and with Smoothwall constantly filtering and monitoring. A record of those children who do not have permission to use the Internet at school is held by the school office.

4   The Foundation Stage

4.1   We teach Computing in FS2 as an integral part of the topic work covered during the year. As the Reception class is part of the Early Years Foundation Stage, we relate the Computing aspects of the children's work to the objectives set out in the Foundation Stage Profile which underpins the curriculum planning. The children have the opportunity to use the computers, a digital camera and a floor robot.

5   The contribution of Computing to teaching in other curriculum areas

5.1   The teaching of Computing contributes to teaching and learning in all curriculum areas. Teachers use software to present information visually and interactively, so that children understand concepts more quickly. For example, work using databases supports work in mathematics, while role-play simulations and the Internet prove very useful for research in humanities subjects. Computing enables children to present their information and ideas in an interactive and appropriate way. Much of the software we use, such as Espresso, is generic and can therefore be used in several curriculum areas.

5.2   **English**

Computing is a major contributor to the teaching of Literacy. Children's reading development is supported through the Little Wandle scheme. As the children develop mouse and keyboard skills, they learn how to edit and revise text on a computer.

5.3   **Mathematics**

Children use Computing in mathematics to analyse results, and present information graphically. Screen robots allow pupils to give exact instructions for a particular route. Generic programmes enable children to learn and practise the mathematical concepts taking place in lessons.

5.4   **Science**

Software is used to animate and model scientific concepts, such as life cycles on Espresso Education.

6   Computing and inclusion

6.1   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.

6.2   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.

7   Assessment for learning

7.1   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. Written or verbal feedback is given to the child to

help guide his/her progress. Older children are encouraged to make judgements about how they can improve their own work.

7.2 The subject leader keeps the children's work digitally on the Purplemash learning platform. This demonstrates the expected level of achievement in Computing for each age group in the school.

8 Resources

8.1 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 Computing suite. The technician will also set up new equipment, and install software.

9 Monitoring and review

9.1 The coordination and planning of the Computing curriculum are the responsibility of the subject leader, who also:

- Teaches the Computing curriculum around school when covering teacher PPA time;
- supports colleagues in their teaching, by keeping informed about current developments in Computing and by providing a strategic lead and direction for this subject;
- gives the Head Teacher an annual summary report in which she evaluates the strengths and weaknesses in Computing and indicates areas for further improvement;
- uses specially allocated regular management time to review evidence of the children's work, assess the impact of teaching and learning and to observe Computing lessons across the school.

9.2 This policy will be reviewed at least every two years.

Signed:

SL Hawley

Date: October 2024