



WOOLGROVE SCHOOL

Computing Policy



“Equal opportunities lie at the heart of all that we do at Woolgrove. We are committed to ensuring that every member of the school community, whatever their position, race, gender, disability or religion, is given the same chance as any other to access the services and support of the school.”

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1 Aims and objectives

- 1.1** 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. Children will develop their programming knowledge and understanding through a range of activities. Computing skills are a major factor in enabling children to be confident, creative and independent learners.
- 1.2** 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;
 - to understand, design and implement a range of computer programs,
 - to use technology, including the internet safely.

2 Teaching and learning style

- 2.1** 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, adults will model how to use programmable blue-bots effectively to navigate a basic course, adults will then pass ownership of the learning over to the children and allow them to setup their own courses and independently navigate them. 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.
- 2.2** 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 teaching assistants to support the work of individual children or groups of children.

3 Computing curriculum planning

- 3.1** The school uses Early Years Foundation Stage (EYFS) and some aspects of the Key Stage 1 (KS1) curriculum for Computing as the basis for its curriculum planning. We have adapted these to the local circumstances of the school, the needs of the children, and to fit with cross curricular work.
- 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 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.

- 3.3 Our medium-term plans, which we have adopted from the national curriculum, 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.
- 3.4 The class teacher is responsible for writing the short-term plans with the Computing component of each lesson. These weekly plans list the specific learning objectives of each lesson.
- 3.5 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.

4 The contribution of Computing to teaching in other curriculum areas

4.1 Cross - Curricular Learning

Cross-curricular learning offers a creative way to develop children's knowledge, skills and understanding while motivating them to learn through stimulating, interconnected topics. As a school all teachers plan termly cross-curricular topics. Where possible computing will be delivered through cross-curricular opportunities as well as stand-alone lessons to focus on specific computing skills.

4.2 Programming

Pupils will begin to understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.

They will do this by designing and implementing their own animations and games.

5 Assessment and recording

- 5.1 Teachers assess children's work in Computing by making informal judgements as they observe them during lessons.
- 5.2 The Computing subject leader keeps samples of the children's work in their subject leader folder. This will then form a collection of evidence, which demonstrates achievement in Computing across the school.

6 Resources

- 6.1 All classrooms within Woolgrove have access to children focussed computers. In addition to the computers each class has a specific classroom iPad and a central bank of iPads that are shared between classes using timetabled slots. Woolgrove also has a computer room with a network of computers for groups of children. The school has Internet access for computers, with high levels of security to ensure all pupils and staff are safe when using the computers. We keep resources for Computing, including software, in a central store.

7 Monitoring and review

- 7.1 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 them informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school.