



St. Saviour's Church, Coalpit Heath.

The Manor C of E Primary School

Policy: Design and Technology

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Approved: _____ Headteacher

_____ Chair of Governors

1 Aims and objectives

1.1 Design and technology prepares children to take part in the development of tomorrow's rapidly changing world. Creative thinking encourages children to make positive changes to their quality of life. The subject encourages children to become autonomous and creative problem-solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas and eventually making products and systems. Through the study of design and technology they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industrial practices. This allows them to reflect on and evaluate present and past design and technology, its uses and its impacts. Design and technology helps all children to become discriminating and informed consumers and potential innovators.

1.2 The aims of design and technology are:

- to develop imaginative thinking in children and to enable them to talk about what they like and dislike when designing and making;
- to enable children to talk about how things work, and to draw and model their ideas;
- to encourage children to select appropriate tools and techniques for making a product, whilst following safe procedures;
- to explore attitudes towards the made world and how we live and work within it;
- to develop an understanding of technological processes, products, and their manufacture, and their contribution to our society;
- to foster enjoyment, satisfaction and purpose in designing and making.

2 Teaching and learning style

2.1 The school uses a variety of teaching and learning styles in design and technology lessons. The principal aim is to develop children's knowledge, skills and understanding in design and technology. Teachers ensure that the children apply their knowledge and understanding when developing ideas, planning and making products and then evaluating them. We do this through a mixture of whole-class teaching and individual/group activities. Within lessons, we give children the opportunity both to work on their own and to collaborate with others, listening to other children's ideas and treating these with respect. Children critically evaluate existing products, their own work and that of others. They have the opportunity to use a wide range of materials and resources, including ICT.

2.2 In all classes there are children of differing ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies:

- setting common tasks that are open-ended and can have a variety of results;
- setting tasks of increasing difficulty where not all children complete all tasks;
- providing a range of challenges through the provision of different resources;
- using additional adults to support the work of individual children or small groups.

3 Design and technology curriculum planning

3.1 Design and technology is a foundation subject in the National Curriculum. Our school uses its own 'framework' which allows the teachers to adapt plans to suit our creative curriculum and the children to develop skills through a variety of different experiences and use of materials.

3.2 Our medium-term plans, give details of each unit of work for each term. They identify learning objectives and outcomes for each unit, and ensure an appropriate balance and distribution of skills and experiences across each term.

3.3 We plan the activities in design and technology so that they build upon the prior learning of the children. We give children of all abilities the opportunity to develop their skills, knowledge and understanding and we also build planned progression into the scheme of work, so that the children are increasingly challenged as they move through the school.

4 The Foundation Stage

4.1 We encourage the development of skills, knowledge and understanding that help reception children make sense of their world as an integral part of the school's work. As the reception class is part of the Foundation Stage of the National Curriculum, we relate the development of the children's knowledge and understanding of the world to the objectives set out in the Early Learning Goals. These underpin the curriculum planning for children aged three to five. This learning forms the foundations for later work in design and technology. These early experiences include asking questions about how things work, investigating and using a variety of construction kits, materials, tools and products, developing making skills and handling appropriate tools and construction material safely and with increasing control.

4.2 We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking and discussion. These activities, indoors and outdoors, attract the children's interest and curiosity.

5 Contribution of design and technology to teaching of ICT

5.1 We use ICT to support design and technology teaching when appropriate. Children use software to enhance their skills in designing and making, and use control programs to model ideas and control finished models.

6 Teaching design and technology to children with special educational needs

6.1 At our school we teach design and technology to all children, whatever their ability. Design and technology forms part of the school curriculum policy to provide a broad and balanced education to all children. Through our design and technology teaching we provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's different needs.

6.2 We enable pupils to have access to the full range of activities involved in learning design and technology. Where children are to participate in activities outside the classroom, for example, a museum or factory trip, we carry out a risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

7 Resources

7.1 Our school has a wide range of resources to support the teaching of design and technology across the school including construction kits, textile resources, resistant materials, tools and ICT hardware and software.

8 Health and safety

8.1 All activities, both on and off site are planned with due regard to health and safety. Children are taught to use tools and equipment under close supervision, including saws, drills and knives. Any visits involving children leaving the school site will be subject to a risk assessment.

9 Monitoring and review

9.1 The monitoring of the standards of children's work and of the quality of teaching in design and technology is the responsibility of the design and technology subject leader and happens through planning scrutiny and lesson observation. The subject leader supports colleagues in the teaching of design and technology, being informed about current developments in the subject through Best Practice Forums and providing a strategic lead and direction for the subject in the school.