



The Magdalen Church of England / Methodist Primary School



Design and Technology Policy

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1 Aims and objectives

1.1 Design and technology allows children to solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. Creative thinking encourages children to make positive changes that can change 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 provides opportunities to apply their understanding of mathematics, science, engineering, computing and art. It enables them to identify needs 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 of functions and industrial practices. This allows them to evaluate present and past design and technology, its uses and impacts. Design and technology helps all children to become informed consumers and potential innovators.

1.2 The objectives of teaching 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 things;
- 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 and products, their manufacture and their contribution to our society;
- to foster enjoyment, satisfaction and purpose in designing and making things.

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. The curriculum is organised so that all elements of the design process are taught with each topic title. This ensures that design, making and evaluation skills are taught in a variety of contexts. There is a mixture of whole-class teaching and

individual and 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 IT.

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;
- grouping children by ability, and setting different tasks for each group;
- providing a range of challenges through the provision of different resources;
- using adults, including parents and grandparents 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 has a curriculum planning document providing teachers with a structured cycle of topics. Each phase has a clear set of learning objectives and outcomes. Teachers plan and prepare for design technology within the context of a cross curricular topic. With the support of the subject leader a balance of activities and styles of learning is maintained.

3.2 Class teachers complete a plan for each design and technology lesson. These list the specific learning objectives and give details of how to teach the lessons. They take into account the prior learning of the children and there is a planned progression through the school.

4 **The Foundation Stage**

4.1 The foundation of understanding and design technology skills are begun in Early Years classes. There are planned opportunities for this subject in Early Years. It is part of the continuous and enhanced provision. It is placed firmly in the context of the topics that the children are learning about and children can follow up their own interests. There are opportunities to learn about design technology indoors and outdoors. There is provision

for small and large-scale work. The children can work individually and with a group of friends. 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 An extensive range of experiences that encourage exploration, observation, problem solving, critical thinking and discussion is used. The Characteristics of Effective Learning are at the heart of the learning and this is reflected in the observational assessment processes.

4.3 Parents and carers are encouraged to contribute observations of their child's use of technology at home.

5 Design and technology and ICT

IT enhances the teaching of design and technology, wherever appropriate, in all key stages. The children use IT to collect information and to present their designs through a range of design and presentation software.

6 Design and technology and inclusion

6.1 At our school we teach design and technology to all children, whatever their ability and individual needs. Design and technology implements the school curriculum policy of providing a broad and balanced education to all children. Through our design and technology 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 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.

7 Assessment for learning

We assess the children's work in Design and Technology while observing them working during lessons. Design and Technology is assessed in accordance with the school's assessment policy. This enables the teacher to make a termly assessment of progress for each child; this is shared with parents as part of our Autumn and Spring Parent Consultations and a full end of year academic report.

8 Health and safety

8.1 In this subject the general teaching requirement for health and safety applies. We teach children how to follow proper procedures for techniques, tools and food safety.

9 British values

In this subject the children learn to work together as a team, especially when work is evaluated. They begin to understand Britain's history in the development of manufacturing, electronics and innovation. Some challenges that are set relate to the needs of less developed countries. They take pride in their own skills and often work with the other generations of their own families.

10 Monitoring and review

10.1 The monitoring of the standards of children's work and of the quality of teaching in Design and Technology is the responsibility of the subject leader. The work of the subject leader also involves supporting colleagues in their teaching, being informed about current developments in Design and Technology, and providing a strategic lead and direction for this subject in the school. The subject leader reviews and evaluates the action plan, budget and planning annually.