The Royal Borough of Kingston upon Thames

# Malden Parochial C of E Primary School



# Design and Technology Policy

Agreed: Summer Term 2020 Reviewed: Summer Term 2022 [or as required]

## **D.T. Policy (Design Technology Policy)**

#### **Vision Statement**

At Malden Parochial, we believe that Design Technology prepares children to deal with our rapidly changing world. It encourages children to become independent, creative problem solvers and thinkers as individuals and part of a team. It enables them to identify needs and opportunities and to respond to them by developing a range of ideas and by making products and systems. Through the study of Design Technology, they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industry. This allows them to reflect on and evaluate past and present technology, its uses and impacts.

#### Intent

At Malden Parochial, we are committed to providing all children with learning opportunities to engage in Design Technology. It should provide opportunities for pupils to be encouraged to use their creativity and imagination to design and make products that will solve the needs, wants and values of people in real-life situations.

Children at Malden Parochial are timetabled to receive Art and Design, and Design Technology teaching in blocks throughout the school year. This may mean that they receive half a term of Art and Design or Design Technology and then swap over. Our curriculum mapping (long term planning) is topic led which provides a cross curricular approach, with many subjects linking and overlapping throughout the topic. Children will learn through an Art and Design curriculum that is clear, progressive with strong links to other curriculum areas. Our Art and Design topics can be found in our curriculum mapping.

See Appendix A – Curriculum Mapping

The children will access the content of these topics at an age and ability appropriate level, building on their Art and Design knowledge and skills from previous years. Further details of this can be found in the following documents.

See Appendix B - Curriculum Coverage

Appendix C – Design Technology Scheme of Work

Appendix D - Skills and Progression Documents

Appendix E – Design Technology Knowledge Based Questions

Appendix F - Design Technology KPIs

Through our Design curriculum at Malden Parochial, our aim is to inspire through this rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems, within a variety of contexts, considering their own and others' needs, wants and values. Children are taught to select and use appropriate tools safely and effectively to make a product. In all areas of Design Technology, the children are encouraged to consider the effectiveness of their designs and requirements of the product. Every child will have the opportunity to learn and extend their understanding, experience and application in the use of technology in as wide a variety of situations as possible.

Through our Design Technology curriculum at Malden Parochial children will:

- learn how to take risks and become resourceful, innovative, enterprising and capable citizens;
- develop an understanding of the importance of design and technology in the wider world;
- develop imaginative thinking skills which will enable them to talk about what they like and dislike when designing and making;
- explore and talk about how things work, and to draw and model their ideas
- explore computing as a means of design;
- develop an understanding of technological processes and products, their manufacture and their contribution to society;
- learn to select appropriate tools and techniques for making a product, whilst following safe procedures;

### Implementation

Design Technology will be taught as an inspiring, practical subject, which encourages children to use their knowledge in Mathematics, Science, Computing and Art to make products that solve real and relevant problems. High-quality Design Technology can make an essential contribution to the creativity, culture, wealth and well-being of a nation.

#### **Roles and responsibilities**

The Subject Leader for design and technology is responsible for:

- Action planning.
- Providing termly updates for staff.
- Organising/running and attending CPD.
- Supporting and planning themed weeks (such as creativity week).
- Reporting to the Governors' Curriculum Committee.
- Auditing and ordering new resources.
- Leading assessment and analysing data.
- Monitoring the standard of the children's work and the quality of teaching in Design Technology.
- Supporting colleagues in the teaching of Design Technology.
- Being informed about current developments in the subject.
- Providing a strategic lead and direction for the subject in the school.

### **Equal Opportunities**

- At Malden Parochial, we value the individuality of all of our children. We are committed to giving our children every opportunity to achieve at the highest of standards.
- We offer a broad and balanced curriculum, and have high expectations of all children.
- We seek to ensure that all pupils have equal access to the full range of educational opportunities provided by the school. We constantly strive to remove any forms of indirect discrimination that may form barriers to learning for some groups.

- We value each pupil's worth, we celebrate the individuality and cultural diversity of the community centred on our school, and we show respect for all minority groups.
- The achievements, attitudes and well-being of all our children matter.

#### Health and Safety

Pupils are made aware of the safe use and correct procedure involved when using tools and equipment in a learning environment, and how to follow proper procedures for food safety and hygiene. Children are made aware of the need to be careful and to understand that their actions can affect others.

Children build up a range of skills when using equipment to reduce unnecessary risk. Certain equipment, such as hacksaws, craft knives and glue guns are to be used only under direct supervision of an adult after proper instruction.

All staff, including helpers, are made aware of food safety procedures when working with food to minimise any risks. The children wear protective clothing where necessary.

#### Planning

Design Technology is a foundation subject in the National Curriculum. Our school uses the national scheme of work as the basis for its curriculum planning in design and technology. We have adapted the national scheme to the local circumstances of our school in that we use the local environment and our topic plan as the starting point for certain aspects of our work.

We carry out the curriculum planning in design and technology in three phases: long-term, medium-term and short-term. The long-term plan maps out the units covered in each term during the key stage.

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 work across each term.

Class teachers plan for individual Design Technology sessions as part of weekly planning. The weekly plan lists the specific learning objectives for each lesson and detail how the lessons are to be taught. The class teacher keeps these individual plans, and the class teacher and Subject Leader often discuss them on an informal basis.

We plan the activities in Design 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.

#### Teaching

Teachers at Malden Parochial are expected to take full part in Design Technology lessons. They are required to model the skills or techniques involved.

Teachers use a variety of teaching and learning styles in Design Technology lessons. Teachers ensure that the children apply their knowledge and understanding when developing ideas, planning and making products, and evaluating them. This is achieved through a mixture of direct teaching and individual/group activities. Within lessons, we give the children the opportunity 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 also have the opportunity to use a wide range of materials and resources, including computing.

We recognise the fact that we have children of differing ability in all our classes, and so we provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. This is achieved through the use of a range of strategies.

#### Organisation

Children are timetabled to receive Design Technology, and Art and Design teaching in blocks throughout the school year. This may mean that they receive half a term of Design Technology, or Art and Design, and then swap over. Our curriculum mapping (long term planning) is topic led which provides a cross curricular approach, with many subjects linking and overlapping throughout the topic.

The children also benefit from many educational visits, themed days and weeks, as well as workshops and visitors to enhance their learning throughout the year.

#### Homework

Children are set homework that adheres to the school's Homework Policy (see school website). The main task varies from subject to subject, but due to the cross-curricular nature of our long term planning, may link to design and technology. This may include research of a particular technique or theme, creating or designing a piece of work etc.

#### Resources

Our school has a wide range of resources to support the teaching of Design Technology across the school. Classrooms have a range of basic resources, with the more specialised equipment being kept centrally.

#### Impact

#### Assessment

Assessment is regarded as an integral part of teaching and learning and is a continuous process. It is the responsibility of the class teacher to assess all pupils in their class. Assessment is carried out through:

- Questioning
- Marking
- Mini-plenaries
- TA feedback
- Self-assessment
- Formal assessment

The school's Assessment and Marking Policies ensure that high quality feedback is given to pupils through next step marking, to which pupils are expected to respond.

Children are also encouraged to reflect on their own work, evaluating and assessing, showing achievement and identifying what they need to improve through the use of a traffic lighting system against given success criteria in every lesson.

At the end of each unit in all foundation subjects, children are formally assessed by class teachers against KPIs to ensure that progress is being made, identifying key children who are working above and below the expectations for their year group. These assessments are submitted to the Headteacher and Subject Leader so that progress can be clearly tracked and monitored.

#### **Monitoring and Evaluation**

Monitoring takes place regularly through sampling children's work, audit of teacher planning, book scrutinise and lesson observations.

Monitoring the standards of children's work and the quality of teaching in Design Technology is the responsibility of the Subject Leader and Leadership Team. The Subject Leader is also responsible for supporting colleagues in the planning and teaching of art and design, for being informed, and informing members of staff of any current developments in the subject, and for providing a strategic lead and direction for the subject in the school.

#### Review

The Subject Leader and Headteacher will review this policy and amend as appropriate in consultation with the Governors.

#### In conclusion

#### Consultation

At the end of each academic year, the coordinator, Headteacher and staff review and evaluate the Design Technology taught. Evaluation should take into account:

- Implementation of the National Curriculum. This will include discussion of the lesson structure, progress of the children in line with key objectives, planning issues and staff needs as regards training and support.
- Pupil achievement, both in formal assessment and by ongoing teacher assessment.
- Coverage of curriculum.
- Analysis of children's books.
- Staff development.
- Any issues arising from teaching, regards common problems or difficulties.
- Children who have not reached the age related expectations.

#### Links to other policies and documents

- Assessment policy
- Marking policy
- Homework policy
- SEND policy
- Inclusion policy

#### Acronyms

D.T. – Design Technology

- KPIs Key Performance Indicators
- CPD Continuing Professional Development
- TA Teaching Assistant

SEND - Special Educational Needs and Disabilities

#### Appendix

- Appendix A Curriculum Mapping
- Appendix B Curriculum Coverage
- Appendix C Design Technology Scheme of Work
- Appendix D Skills and Progression Documents
- Appendix E Design Technology Knowledge Based Questions
- Appendix F Design Technology KPIs