St Charles’ Catholic Primary School

**ST CHARLES’ CATHOLIC**

**PRIMARY SCHOOL**

**DESIGN**

**AND**

**TECHNOLOGY**

**POLICY**

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AGREED:

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# Our Mission at St Charles’ Catholic Primary School is to… LOVE, LEARN, GROW TOGETHER

**ST CHARLES’ CATHOLIC PRIMARY SCHOOL DESIGN AND TECHNOLOGY POLICY**

## 1 Aims and objectives

**1.1** Design and Technology is essentially a practical subject that allows children to think imaginatively and creatively and to become more autonomous and effective problem solvers, both as individuals and as part of a team. Our aim is to provide children with a rich and enjoyable experience of design and technology, in which they can acquire and develop their own designing and making skills.

**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, making and evaluating.
* To enable children to talk about how things work, and to draw and model their initial and final ideas;
* To encourage children to select appropriate tools and techniques for making a product, whilst following safety 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.
* To understand the principles of a healthy and varied diet and know where food comes from.

## 2 Teaching and learning style

**2.1** St Charles’ Catholic Primary 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 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** The long-term plan maps out the units covered in each term during the key stage. The design and technology subject leader works this out in conjunction with teaching colleagues in each year group.

**3.2** An afternoon session weekly per half-term (approx. 1 hour) will be allocated to teaching design and technology. For some activities it may be more appropriate to block time e.g a DT week. Teachers will be given the flexibility to decide the best approach for each topic.

**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 our children across our early years provision children make sense of their world as an integral part of the school’s work. We relate the development of the children’s expressive arts and design and their understanding of the world to the objectives set out in the Early Learning Goals. These underpin the curriculum planning for children aged four 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 problem solving skills, making skills and handling appropriate tools and construction material safely and with increasing control. In the early years foundation stage we introduce the idea of planning and designing through communicating ideas verbally and recording with pictures and early writing marks.

**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 in other curriculum areas

### 5.1 English

Design and Technology contributes to the teaching of English in our school by providing valuable opportunities to reinforce what the children have been doing during their English lessons. The evaluation of products requires children to articulate their ideas and to compare and contrast their views with those of other people. Through discussion children learn to justify their own views and clarify their design ideas.

### 5.2 Mathematics

In Design and Technology there are many opportunities for children to apply their mathematical skills through choosing and using appropriate ways of calculating measurements and distances. They learn how to check their results of calculations for reasonableness and learn how to use an appropriate degree of accuracy for different contexts. Children learn to measure and use equipment correctly. They apply their knowledge of fractions and percentages to describe qualities and calculate proportions. The children will carry out investigations and in doing so; they will learn to read and interpret scales, collect and present data and draw their own conclusions. They will learn about size and shape and make practical use of their mathematical knowledge in order to be creative and practical in their designs and modelling.

### 5.3 Computing

We use ICT to support design and technology teaching when appropriate. Children use software to enhance their skills in designing and making. The children also use ICT to collect information.

### 5.4 Personal, social and health education (PSHE) and citizenship

Design and Technology contributes to the teaching of personal, social and health education and citizenship. We encourage the children to develop a sense of responsibility in following safe procedures when making things. They also learn about health and healthy diets. Their work encourages them to be responsible and to set targets to meet deadlines, and they also learn through their understanding of personal hygiene, how to prevent disease from spreading when working with food.

### 5.5 Spiritual, moral, social and cultural development

The teaching of Design and Technology offers opportunities to support the social development of our children through the way we expect them to work with each other in lessons. Our groupings allow children to work together, and give them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and co-operative work across a range of activities and experiences in design and technology, the children develop respect for the abilities of other children and a better understanding of themselves. They also develop a respect for the environment, for their own health and safety and for that of others. They develop their cultural awareness and understanding, and they learn to appreciate the value of differences and similarities. A variety of experiences teach them to appreciate that all people are equally important, and that the needs of individuals are not the same as the needs of groups.

## 6 Teaching Design and Technology to children with special needs

**6.1** We teach Design and Technology to all children, whatever their ability. Design and Technology also forms part of our school curriculum policy to provide a broad and balanced education to all children. Teachers provide learning opportunities that are matched to the needs of children with learning difficulties.

### 6.2 Access to the curriculum

St Charles’ Catholic Primary School recognises that all children have an entitlement to a broad, balanced and relevant curriculum. Lessons have clear learning objectives; work is differentiated appropriately and we use assessment to inform the next stage of learning.

## 7 Assessment and recording

Progress in Design and Technology is demonstrated through regularly reviewing and scrutinising children’s work, in accordance with our monitoring timetable to ensure that progression of skills is taking place.

Namely through:

 Looking at pupils’ work, especially over time as they gain skills and knowledge  Talking to them about what they know.

At the end of each topic the class teacher must complete a tracking assessment sheet stating if each child is working towards the expected standard, at the standard or at greater depth. Teachers then use their judgments so that they record make an annual assessment of progress for each child, as part of the annual report to parents.

## 8 Resources

**8.1** We have a wide range of resources to support the teaching of Design and Technology across the school. Resources and specialised equipment is kept in the Design and Technology store and is only accessible to adults.

## 9 Health and safety

**9.1** The general teaching requirement for health and safety applies in this subject. Teachers will always teach the safe use of tools and equipment and insist on good practice. Children will be taught to return tools to the toolbox when not in use. We teach children how to follow proper procedures for food safety and hygiene.

## 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 design and technology subject leader. The work of the subject leader also involves supporting colleagues in the teaching of Design and Technology, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school.