

**St. Francis' Design and  
Technology Policy**  
**2019**



## 1. Aims, objectives and Intent:

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.

The national curriculum for design and technology aims to ensure that all pupils:

- ♣ develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- ♣ build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- ♣ critique, evaluate and test their ideas and products and the work of others
- ♣ understand and apply the principles of nutrition and learn how to cook.

KS1: Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].

KS2: Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

Design and technology helps all children to become discriminating and informed consumers and potential innovators.

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.

We have created a DT Greenhouse and place great emphasis on resourcing our DT curriculum such as Lego Coding kits and woodwork resources.

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;
- St.Francis' DT Policy
- grouping children by ability and setting different tasks for each group;
  - 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

Design and technology is a foundation subject in the National Curriculum. Our school uses the National Curriculum scheme of work as the basis for its curriculum

planning in design and technology. We also follow topics from the Lancashire plans but we adapt these to fit the purpose of our school curriculum.

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 and 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.

Every class teacher has a 'Curriculum Consultation' planning sessions with the Headteacher and Deputy Headteacher to brainstorm cross curricular opportunities for DT. We aim to link DT to Multimodal writing wherever possible. Children make front covers for their books and design and make props for their writing.

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. EYFS Stage

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.

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:

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 children make handy booklets/instruction manuals and other genre specific pieces of writing to accompany their creations. 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.

#### Computing

We use ICT to support design and technology teaching when appropriate. Children use software to enhance their skills in designing and making, and use draw-and-paint programs to model ideas. They use databases to provide a range of information sources to gain access to images of people and environments. The children also use ICT to collect information and to present their designs through a range of programs.

#### HRSE, British Values 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.

#### 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 teaches 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 additional needs

At St.Francis, 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. Assessment against the National Curriculum allows us to consider each child's attainment and progress against expected levels.

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. We use our school minibus to take our children to visit museums and work with local artists and skilled professionals.

### 7. Assessment and recording

Teachers assess children's work in design and technology by making assessments as they observe them working during lessons. Each class teacher has a Curriculum Progress and assessment book to track and make notes of all learners.

Gifted and talented children work alongside children from other school and high schools to extend their flare for the subject and learning even further.

They record the progress by assessing the children's work against the learning objectives for the task. Success criteria for each unit of work is discussed with the children in order that they are aware of the expectations.

Topic front covers are used at the beginning of each topic for the children to know exactly what they will be learning and how the subject link with others. Taster tables are used to inspire children and their thirst for knowledge.

### Resources

Our school has a wide range of resources to support the teaching of design and technology across the school. Resources are stored in the DT greenhouse.

### Health and safety

The general teaching requirement for health and safety applies in this subject. We teach children how to follow proper procedures for food safety and hygiene.

### Monitoring and review

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 the Headteacher. 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. Lesson observations and scrutiny of children's work form part of the review process.

Signed: W. Silvester

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