



St John's Catholic Primary School

Design & Technology Policy

Mission Statement

love of learning
and playing together
one community
aiming high
helping each other
and praying together

On our journey with Christ

The aim of this policy is to guide teachers and support staff in providing the best possible learning experiences for our children. We believe that every child is a child of God; we will encourage in all children the knowledge and love of God, and in a concern and care for others; we will value each child for who they are and what they are; and we will ensure that every child has the opportunity to become the person God knows them to be, irrespective of their starting points, background or cultural and religious beliefs.

Our mission sets out our commitment to 'aiming high'. Improvements in the quality of teaching and learning are brought about through a process, which involves:

- reflection by individual professionals
- acting on planning feedback and guidance
- use of assessment data
- the target setting process
- sharing in-house expertise through
 - joint/team planning
 - discussion with colleagues, subject coordinators and SLT
 - Staff training at school
 - Team teaching lessons
 - Peer observation and lesson studies
- implementation of recommendations arising from classroom observation
- effective response to guidance from advisers and implementation of OfSTED Action Plan
- CPD courses

This policy will be reviewed regularly to enable us to take account of new initiatives, curriculum changes, technological developments and any changes to our pupil cohort profile.

Aims and Objectives

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, values and opportunities and to respond by developing ideas, and eventually making products and systems. Design and technology helps all children to become discriminating and informed consumers and potential innovators for our nation.

Our aims in the teaching of design and technology are:

- 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

Teaching and Learning

The school uses a variety of teaching and learning styles in design and technology lessons. 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 or 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.

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 additional adults to support the work of individual children or small groups.

Curriculum Planning

Design and technology is a foundation subject in the National Curriculum.

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

EYFS

We encourage the development of skills, knowledge and understanding that help young children make sense of their world as an integral part of the school's work. As the Nursery and Reception classes teaching is based on the Foundation Stage Curriculum, links are made to the area knowledge and understanding of the world, which 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.

Contribution to the Catholic Ethos

“Artistic talent is a gift from God and whoever discovers it in himself has a certain obligation; to know that he cannot waste this talent, but must develop it”.- Pope John Paul II

By preparing our pupils explore and develop their artistic talents and abilities, we are ensuring that they are able to fulfil their God-given potential.

Contribution to the other curriculum areas

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. Discussion, drama and role-play are important ways that we employ for the children to develop an understanding of the fact that people have different views about design and technology. 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.

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. Children learn to measure and use equipment correctly. They apply their knowledge of fractions and percentages to describe quantities 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.

Inclusion

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.

Assessment for learning

Teachers informally assess children's work in design and technology by making assessments as they observe them working during lessons. At the end of the year a unit of work, teachers make a formal judgement against the National Curriculum levels of attainment which is shared with parents. Older children are encouraged to make judgements on ways in which their work can be improved.

Resources

Our school has a wide range of resources to support the teaching of design and technology across the school.

Monitoring and review

The coordination and planning of the design technology curriculum are the responsibility of the subject leader, who also:

- supports colleagues in their teaching, by keeping informed about current developments in design technology, and by providing a strategic lead and direction for this subject in the school;
- give the headteacher an annual summary report in which s/he evaluates the strengths and weaknesses in design technology, and indicates areas for further improvement;