



# **Roman Road Primary School**

## **Policy for Design and Technology**

## **POLICY FOR DESIGN AND TECHNOLOGY**

### **Rationale for Design and Technology**

This policy reflects Roman Road Primary school's values and philosophy in ensuring children attain the opportunity to use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.

They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. This policy sets out a framework within which teaching and non-teaching staff can operate and gives guidance on planning, teaching and assessment.

The policy should be read in conjunction with the scheme of work, which can be used as a springboard to develop the individual teacher's ideas in a personal way, knowing they are within the school's guidelines. This should enable teachers to design a programme of activities which is responsive to their own, and children's, skills and needs in art at that particular time.

### **Audience**

This document is intended for:

- All members of teaching staff
- The school governors
- Parents/Carers
- LEA advisers and inspectors
- Inspection teams

This policy document, having been presented to and agreed upon by the staff and governing body, is distributed to all individual members of the teaching staff and school governing body.

Such distribution ensures accessibility of the document to visiting teachers, outreach and support staff and parents.

Roman Road Primary School believes it is important to help parents to understand the curriculum and become involved in children's learning. Therefore, a copy is available for parents and carers in the foyer.

## **Subject Aims and Objectives**

A high-quality art and design education should engage, inspire and challenge pupils, equipping them with the knowledge and skills to experiment and create their own works of art, craft and design.

As pupils progress, they should be able to think critically and begin to develop an understanding that art reflects and shaped our history, and contribute to the culture, creativity and wealth of our nation.

The National Curriculum for Design and Technology aim 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.

## **Attainment Targets**

### **Early Years Foundation Stage**

Expressive Arts and Design and Technology are two aspects of Understanding of the World in the Early Years Foundation Stage.

Designing and making is one of the aspects of knowledge and understanding of the world. Children are encouraged to build with a wide range of objects, selecting appropriate resources and adapting their work where necessary.

## **Key stage 1**

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

When designing and making, pupils will be taught to:

### **Technical Knowledge**

- Build structures, exploring how they can be made stronger, stiffer and structurally stable.
- Explore and use mechanisms (for example, levers, sliders, wheels and axles) in their products.

### **Design**

- Design purposeful, functional, appealing products for themselves and other users based on design criteria.
- Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.

### **Make**

- Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing).
- Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.

### **Evaluate**

- Explore and evaluate a range of existing products.
- Evaluate their ideas and products against design criteria.

## **Key stage 2**

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).

When designing and making, pupils should be taught to:

### **Technical Knowledge**

- Investigate and analyse a range of existing products.
- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- Understand how key events and individuals in design and technology have helped shape the world.

### **Design**

- Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular audience.
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

### **Make**

- Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately.
- Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.

### **Evaluate**

- Investigate and analyse a range of existing products.
- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- Understand how key events and individuals in design and technology have helped shape the world.

When learning Design and Technology the children will be provided with a range of skills, concepts and attitudes. They will also be taught to master a range of techniques and methods of working.

## **Curriculum and School Organisation**

All year groups are following the D&T scheme of work developed by the subject leader and curriculum coordinator. Each year group is following a detailed plan of the topic and skills to cover and how. Teachers have been encouraged to use this to help plan their lessons and ensure that lessons meet the specific needs of their class.

The ends of unit evaluations are being completed at the end of every unit of work. We aim for 90% of pupils to be at or above their age-related expectations.

Every pupil (years 1- 6) has their own art book and teachers have been encouraged to ensure that these books are used directly to record their work. This has allowed teachers to assess children's skills and more importantly it helps children to monitor their own progress in their designing skills.

## **Resources and Accommodation**

An inventory of resources is available, it outlines the art materials available and the teachers' resources which they may require when delivering various units of work.

As a curriculum area Design and Technology has a subject coordinator: **Sarah Redmond**. The Coordinator receives information and resources that arrive in school and distributes them accordingly.

The design and Technology Subject coordinator is responsible for ensuring that resources are maintained and monitored. Resource purchasing is in accordance with normal school procedures and comes from the Design and Technology budget.

## **Equal Opportunities, Special Needs & Providing for Children with English as an Additional Language**

All teaching and non-teaching staff are responsible for ensuring that the pupils in their care, irrespective of gender, ethnicity, language group, disability, religious beliefs, social circumstances and ability, have equal access to the whole curriculum and equal opportunity to undertake all aspects of work in history in order to make the maximum progress.

We aim to do this by:

- Taking the individual needs of children into account
- Using language which is appropriate to each child's ability
- Avoiding the negative use of written, spoken and body language
- Choosing books, worksheets, posters, tapes etc., which display positive images, represent the different backgrounds of our pupils and which avoid stereotypes
- Choosing resources which are user friendly and easily accessible to all
- Showing in our planning how tasks are differentiated and targeted for children of differing abilities
- Ensuring that recording and assessment is fair, gives equal value to different activities and avoids stereotypical assumptions.

We believe that all children at ROMAN ROAD PRIMARY SCHOOL should have equal access to the whole curriculum and equal opportunity to undertake all aspects of work in order to make the maximum progress and demonstrate achievement irrespective of ability (including Gifted and Talented) or special educational needs, gender, ethnicity, language group, disability, religious beliefs or social circumstances.

Where pupils have special educational needs which are not identified as being learning difficulties, but requires other special provision (e.g. the use of technological aids in practical and written work) then we will as a school, endeavour to make appropriate provision for such children.

We aim to do this by:

- Taking the individual needs of children into account using language which is appropriate to each child's ability
- Avoiding the negative use of written, spoken and body language
- Choosing books, worksheets, posters, tapes etc., which display positive images, which represent the different backgrounds of our pupils and which avoid gender stereotypes
- Choosing resources which are user friendly and easily accessible to all children
- Showing in our planning how tasks are differentiated and targeted for children of differing abilities
- Ensuring that recording and assessment is fair, gives equal value to different activities and avoids stereotypical assumptions.