Overleigh St Mary's CE Primary School

Design and Technology Policy

Signed by:

	Head teacher	Date:	Summer 2024
	Chair of governors	Date:	Summer 2024

DESIGN AND TECHNOLOGY POLICY

Date to be reviewed: March 2024
Coordinator: Ian Mander
Nominated Governor: Karen Shapland

Our Vision

Overleigh St. Mary's C.E Primary School, a caring centre of learning, where all individuals are inspired and enabled to achieve excellence in every aspect of school life – academic, social, personal, physical and spiritual.

Our school motto of '**Children First**' proudly beats through the heart of our thriving community.

At Overleigh St. Mary's our culture of high expectations in everything that we do ensures educational excellence for all with no child left behind. We strive for and achieve academic excellence with opportunities to develop wider sporting, artistic and social skills. We want our children to have a clear sense of moral purpose and character as well as to be enquiring, reflective and passionate learners. When our children leave us they display honesty, integrity, resilience, perseverance, compassion and self-discipline.

As a church school we nurture spiritual growth and provide an environment where each child can develop and fulfil their potential as a citizen of the future. Through a personalised, relevant and engaging curriculum we develop 21st Century skills ensuring our children embark on life confident of their place within a global society and able to become leaders in it.

INSPIRE. EDUCATE. SUCCEED

PURPOSE / VISION STATEMENT for DESIGN & TECHNOLOGY

Design and technology prepares children to take part in the development of tomorrow's rapidly changing world. In addition to this, creative thinking enables children to make positive changes to their quality of life. Design and Technology encourages children to become autonomous and creative problem-solvers, both as individuals and as part of a team. It helps them to identify needs and opportunities and to respond by developing ideas, and eventually making products and systems for an identified purpose. Through the study of design and technology, they combine practical skills with an understanding of purpose-based, aesthetic, social and environmental issues, as well as of functions and safe use of tools and procedures. This allows them to reflect on and evaluate present and past design and technology, its uses and its impacts. Design and technology helps all children to become discriminating and informed consumers and potential innovators.

AIMS & OBJECTIVES

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

- produce creative work fit for a particular purpose, explore ideas and record their design ideas
- build skills and knowledge in the key areas of: mechanical systems, electrical systems, textiles, structures and food.
- evaluate and analyse creative works using the language of design and technology
- know about great designers, craft makers and artists, and understand the historical and cultural development of their work.

IN EYFS
EYFS design and technology- 'Knowledge and Understanding of the World':
Children are given first hand experiences where they are encouraged to: explore, observe, solve problems, think critically, make decisions and to talk about why they have made their decisions
In Year 1 and 2
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
-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
Technical knowledge:
-*build structures, exploring how they can be made stronger, stiffer and more stable*
- *explore and use mechanisms, in their products.*
Cooking & Nutrition:
-use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

In Year 3 and 4 ,5 and 6

Design:

-use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
-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 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

Technical knowledge:

-*apply their understanding of how to strengthen, stiffen and reinforce more complex structures*
-understand and use mechanical systems in their products
-understand and use electrical systems in their products
-apply their understanding of computing to programme, monitor and control their products.

Cooking & Nutrition:

-understand and apply the principles of a healthy and varied diet
-cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet
-become competent in a range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients; adapting and using their own recipes]
-understand the source, seasonality and characteristics of a broad range of ingredients

At Overleigh St. Mary's, children will document their design skills in KS1 and KS2 in their topic books or as final separate pieces Final pieces may then be completed and photographed to add to the design technology process alongside evaluation of their products.

All year groups will experience and take inspiration from the work of notable designers and crafts-people.

PROCESSES IMPLEMENTED IN SCHOOL

Teaching and Learning

Planning the Curriculum

All children are given the opportunity to undertake a balanced programme of Design and Technology activities following the National Curriculum, broken down into various discrete techniques and skills. All children should be taught these techniques and skills, taking

inspiration from crafts-people or designers. All planning across the school should therefore be thematic, with themes, designers and techniques linked appropriately.
Teachers are provided with long and medium term plans as well as Knowledge Organisers which provide all the objectives, key thinking, designing and focused task suggestions as well as key vocabulary and resource sites they will need to utilise in order to fulfil the National Curriculum requirements.

Foundation Stage

Teachers use the early learning goals for creative development.

Key Stage 1 and 2

During Key Stage 1 and 2, Design and Technology should be planned for as part of the year groups' long-term plan and/or topic web. This information should then be used to create short term, more detailed planning.

Children's work is displayed and reflects the ethos of the school creating an interesting and vibrant working environment.

All teachers will be responsible for the planning and teaching of design technology.
The range of stimulus should include designs and products- wherever possible from a wide variety of cultures and traditions as well as both male and female craft workers, inventors and designers through history.

Teaching and Learning

i. Special Educational Needs

The design and technology curriculum is accessible to all children including boys and girls, pupils with special educational needs, pupils with disabilities, pupils from all social and cultural backgrounds, pupils of different ethnic groups and those of diverse linguistic background.
Teachers should teach knowledge, skills, and understanding in ways that suit their pupils' abilities. The progression in skills document can support differentiation to suit individual needs, including, but not limited to: support, adaptation of task, both writing and practical.

iii. Health and Safety

Children should be taught and be made aware of safe practice during every design and technology lesson. All design activities will be carried out in a safe working environment. It is the teacher's responsibility to ensure the safety of each child during design lessons and on their planning of activities, teachers will anticipate potential safety issues. They will also explain the reasons for safety measures and discuss any implications with the

children. Children should also be encouraged to consider safety for themselves, others, the environment and their resources they use, when undertaking art and design activities.

DISSEMINATION

This policy and all subsequent changes in practice due to developments in the subject (at a local and national level) will be shared with all staff at regular staff meetings.

RESOURCES / RESOURCE ALLOCATION

Resources are stored in the Design and Technology resource areas. The subject leaders or class teachers are responsible for purchasing resources and maintaining the resource area, with the support of the staff that use it.

RESPONSIBILITIES

AS A GOVERNOR

The governing body will be informed of significant developments within the subject area and, if necessary, their approval will be sought. Our governors support, monitor and review the school's policies.

AS THE HEADTEACHER

Alongside the senior leadership team and the subject leader, it is the Headteacher's responsibility to monitor standards.

AS THE CO-ORDINATOR

The responsibility for ensuring coverage of the National Curriculum lies first with the subject leader but ultimately with the individual teacher. The subject leader will ensure specific responsibilities for effective leadership and management of the subject are fulfilled.

AS A TEACHER

The responsibility for ensuring coverage of the National Curriculum lies first with the subject leader but ultimately with the individual teacher. It is each teacher's responsibility to ensure that all children have access to the Design Technology curriculum through quality first teaching.

AS A PARENT/PUPIL/OUTSIDE AGENCY

Curriculum stating Design and Technology skills to be covered, are available to parent's half termly on the school website. End of year reports may comment on a child's aptitude for the subject as well as their enthusiasm for the topics covered.

ASSESSMENT AND RECORDING

The learning outcomes in each unit show how children might demonstrate what they have learnt. Children's work will serve as a record for each class working within each term's context for learning. It is not necessary to make detailed records for each child but teachers should be aware of the skills they acquire and what they know about the tools and materials they use, as well as their understanding of the world of design and technology through the artists they are introduced to. Considering these key factors alongside how the children generate ideas, what they make and how they evaluate, will guide teachers in their judgment.

Teachers should display a range of design technology work for pupils, teachers and parents to observe. KS1 and KS2 should use their DT books to document the children's design and technology work. Events, such as competitions and DT day, will provide a rich environment to exhibit the children's design work.

Twice a year parents will have the opportunity to discuss children's progress with the class teacher. Once a year a written report will be sent home which may include references to art and design progress.

MONITORING & REVIEW

The subject leader is responsible for monitoring the standards of the children's work and the quality of teaching in Design Technology. The subject leader is also responsible for supporting colleagues in the teaching of Design and Technology, for being informed about current developments in the subject, and for providing a strategic lead and direction for the subject in the school.