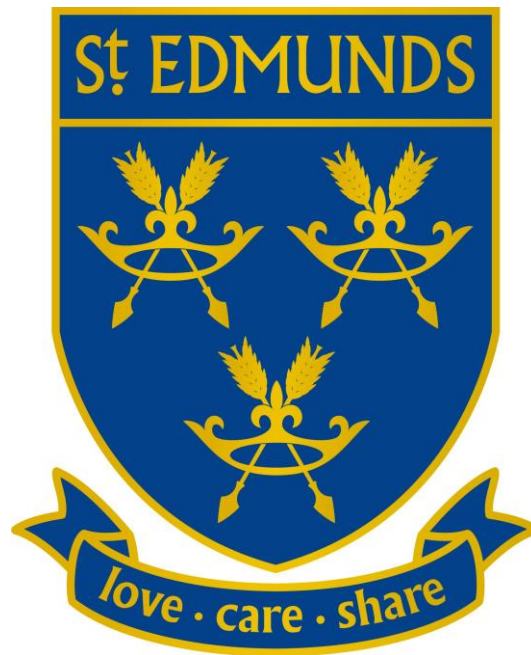


St Edmund's Catholic Primary School



Design and Technology Policy

February 2021

The policy below has been reviewed in light of the Covid-19 pandemic. Amendments will be numbered and listed at the bottom of the document.

Contents

Introduction	1
Aims and Objectives	1
Legislative requirements and non-statutory guidance	1
Roles and responsibilities	2
Curriculum planning	2
Teaching and learning	4
Inclusion and Equal Opportunities	5
Assessment	6
Monitoring and Evaluation	6

Introduction

Design and Technology is a vital part of our daily lives and is an important part of pupils' learning at St Edmunds Catholic Primary School because it equips our children with an extensive range of practical skills. Children are encouraged to develop their research, problem-solving, teamwork and creative thinking skills and also to make improvements to existing ideas and products. Design and Technology gives our children the opportunity to work and think as individuals and as part of a team, which helps them develop and learn while demonstrating the school's key practices and values. There are significant links between Design and Technology and many other areas of the curriculum such as maths, science, computing, history and art, which provides opportunities for children to explore different learning experiences.

Aims and Objectives

Our objectives in the teaching of design and technology are:

- to give children the opportunity to take part in creative and practical activities
- to understand the importance of design and technology in the wider world
- to develop imaginative thinking in children and to enable them to talk about what they like and dislike when designing and making things
- to enable children to talk about how things work, and to draw and model their ideas
- to explore computing as a means of design
- to encourage children to be analytical and critical when they are considering and analysing products
- to encourage children to select appropriate materials, tools and techniques for making a product
- to follow safe procedures when using equipment
- to develop an understanding of technological processes and products, their manufacture and their contribution to society

Legislative requirements and non-statutory guidance

This policy is written with reference to:

National Curriculum Primary programmes of Study for KS1 and KS2.

Roles and responsibilities

Subject Leader

The role of the subject leader is:

- to work in collaboration with the art TA to implement the teaching of Design and Technology across the school.
- to manage the budget and ensure that all resources are available throughout the year.
- to ensure that Design and Technology is an important part of school life at St Edmunds and allow children to share their success through display work.
- to create curriculum maps for teachers to plan from. These include half termly plans and weekly plans. The long term plans provide guidance on themes, skills, outcomes and linked designers.
- to create a progression map for Design and Technology.
- to ensure continuity and progression across the Key Stages.

The Head teacher and Senior Leadership Team (SLT)

The Head teacher and SLT will review all curriculum policies every two years and through monitoring and assessment procedures will look at the strategic overview of how this policy is being implemented.

The governing board

Curriculum governors will review this Design and Technology policy in conjunction with the Head teacher and monitor the policy's effectiveness.

Teachers

Teachers will ensure that their planning and teaching reflects the practice and procedures outlined within this policy, having regard also to the progression of skills map.

Curriculum planning

Early Years Foundation Stage

The class teachers in Foundation Stage are responsible for delivering their own Design and Technology lessons within the classroom. They use the EYFS policy to plan their lessons and often use cross-curricular links to do this.

Key Stage One

In Key Stage One, the class teachers are responsible for planning their own D&T lessons. However, in Year 2 the art TA is responsible for delivering the lessons. The class are split into two groups and take it in turns to go to the Art room to complete the lesson.

The class teachers in Year 1 are responsible for delivering their own D&T lessons within the classroom.

Key Stage One teachers use the long-term plans to plan their weekly lessons and often use cross-curricular links to do this. The long-term plans are taken from the curriculum maps that are produced by the subject leader.

Key Stage Two

In Key Stage Two, the art TA is responsible for delivering the lessons. The class are split into two groups and take it in turns to go to the Art room to complete the lesson.

Key Stage One teachers use the long-term plans to plan their weekly lessons and often use cross-curricular links to do this. The long-term plans are taken from the curriculum maps that are produced by the subject leader.

Subject content

Key stage 1

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in a 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].

When designing and making, pupils should be taught to:

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

Technical knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. Design and technology – key stages 1 and 2 3

Key stage 2

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in a 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:

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 [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

Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products.

Teaching and Learning

The principal aim of teaching Design and Technology at St Edmunds Catholic Primary School is to develop children's knowledge, skills and understanding in design and technology. We ensure that the children apply their knowledge and understanding when developing ideas, planning and making products, and evaluating them. Within lessons we give the children the opportunity 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 computing.

Cooking and Nutrition

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

At St Edmunds we convert the Art room into a cooking space and clear all surfaces ready for preparing and cooking food. This part of the curriculum is led by Mrs Pope and Mrs Kenny who teach children the skills and techniques required to produce balanced, healthy meals. The children in Reception and Year 1 do not go to the Art room to cook, instead they discuss where food comes from and prepare simple dishes in their own classrooms.

Pupils are taught to:

Key stage 1

- use the basic principles of a healthy and varied diet to prepare simple dishes
- understand where food comes from.

Key stage 2

- understand and apply the principles of a healthy and varied diet
- prepare and cook a variety of dishes using a range of cooking skills and techniques
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Health and Safety

Design and Technology requires the children to use knives and cutting tools which can be dangerous. At St Edmunds Catholic Primary School we teach the children how to hold knives in a safe and secure way. We also give children child-friendly knives that aren't very sharp to avoid injury. If the children do get a small cut, teachers have blue plasters available to put on them or teachers should follow the First Aid procedures.

Using the oven and hob

Many cooking lessons involve using the oven or hob. The teacher leading the lesson will turn on all equipment and ensure that most children are sitting down when food is being cooked. Some responsible children may be asked to stir ingredients on the hob or check that food is ready to be eaten, however an adult will be assisting at all times.

First Aid

If anyone should become ill or suffer injury as a result of an accident, the procedures below should be followed:-

- First aid should be rendered but only as far as knowledge and skill permit.
- The patient should be given all possible reassurances and removed from danger.
- Seek further medical assistance if necessary

A separate First Aid and Medical Treatment policy is available and should be referred to.

Allergy

There are several children in the school with allergies (refer to allergies list in the medical room). We aim to avoid using any foods that the children are allergic to and St Edmund's is a nut-free school, however if any child does suffer an allergic reaction teachers must follow school procedures. If the child has an epi-pen, then it must be brought to the child and administered by an adult, but if the child does not have an epi-pen then an ambulance must be called immediately.

Inclusion and Equal Opportunities

At St Edmunds Catholic Primary school we teach design and technology to all children, whatever their ability and individual needs. Through our design and technology teaching we provide opportunities for all pupils to make good progress

Pupil premium children are selected to attend a weekly cooking after-school club. They are given the opportunity to work in a small group to make simple recipes to take home to their families. This allows them to grow in confidence and learn life skills that will prepare them for later life. Some SEN children are supported by their LSA in D&T lessons.

Assessment

- We assess the children's work in Design and Technology while observing them working during lessons.
- The work produced at the end of each unit serves as a record of their progress and development. In EYFS and Year One, these assessments are carried out by the class teacher and in Years 2 – 6 they are carried out by the art TA as she teaches the lessons and is able to see the outcome of each unit. Teachers and the art TA are able to make a judgement against the National Curriculum expectations which are then entered into ScholarPack at checkpoints 2, 4 and 5. Attitude to learning in Design and Technology are reported to parents annually as part of their individual report.

Monitoring and Evaluation

The subject leader will take responsibility for monitoring the effectiveness of this policy in school practice on a day to day basis, taking part in monitoring of their subject through learning walks, book scrutinises, moderations and discussions with children and class teachers throughout the year.

They will assess school practice against the aims and objectives set out at the beginning of this policy and provide evidence of the policy in practice. This could take the form of:

- designs in sketchbooks
- long, medium and short term plans
- large scale projects such as 3D models and structures

The Head teacher and SLT will meet with subject leaders to evaluate the impact of this policy and identifying actions to remedy any problems arising or address any changes in practice.

This policy is to be reviewed in February 2023

Covid-19 Amendments

1. The art room is no longer in use.
2. Design and Technology lessons are all being taught in classrooms, although this means that certain activities are not allowed to take place i.e sawing, filing, glueing. The curriculum has been amended due to these restrictions but all children are still being taught weekly Art or D&T lessons.
3. The art TA is still delivering some D&T lessons to children in years 2-6 in their bubbles. These lessons will not meet all of the D&T curriculum objectives, but we aim to ensure that children from all key stages will do some D&T during the year.
4. There are no cooking lessons at all.
5. The cooking after-school club is cancelled.