

Sacred Heart Catholic Primary School Design and Technology

Design and Technology in primary schools develops children's skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food. It encourages children's creativity and encourages them to think about important issues.

Design and Technology Association



Design and Technology aims to provide pupils with a variety of creative and practical activities which will allow them to develop the knowledge, understanding and skills needed to engage in the process of designing and making.

At Sacred Heart we believe that Design and Technology is essential and enables children to become adults who are able to take risks, become resourceful, innovative, enterprising and capable citizens. (National Curriculum 2014)

We believe that Design and Technology is an inspiring, rigorous and practical subject. We believe it helps pupils to:

- Recognise the importance of design and technology in the world
- Think creatively and critically
- Investigate and evaluate
- Take risks and develop resilience

- 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 foster enjoyment, satisfaction and purpose in designing and making;
- To use ICT software to assist our designing and learning.

Intent

Our Design and Technology curriculum has been developed to give full coverage of the Design and Technology Programme of Study detailed in the National Curriculum 2014 (see below for documentation).

We are developing a Creative curriculum where learning will be topic based and cross curricular. Children will develop the appropriate skills, knowledge and understanding as set out in the National Curriculum through carefully planned and relevant projects linked to their current learning.

Our curriculum is designed to teach Design and Technology as a means of learning about the designed and made world and how things work, and learning to design and make functional products for particular purposes and users.

The Design and Technology curriculum has been developed around the premise that it :

- be based on children's existing knowledge, understanding and skills
- offers a means for pupils to research, observe, ask and answer questions
- provides models of designers and designs that have contributed to the world around us
- gives an understanding of the principles of nutrition and how to apply these
- allows pupils to develop the skills necessary to cook
- enables pupils to critique, evaluate and test their ideas and products and talk about and share their ideas with others.
- Expose pupils to the various strands of specialisation but which are still related

Implementation

Our Design and Technology curriculum aims to enable pupils to acquire and apply their knowledge and understanding alongside practical, hands-on activities following the research, design, make and evaluate process. Pupils will learn the practical skills needed and the vocabulary needed to talk about the processes involved throughout the project.

Pupils will learn about significant, innovative designers and their designs in the past and present and consider the need for sustainability in product development for the future. They will learn about nutrition and how to cook.

Our Design and Technology curriculum aims to enable pupils to:

- be able to think creatively and innovatively
- be appreciative of the contribution design has in our lives in everyday life
- to be enterprising and appreciate the influence design has on lives
- develop a positive critical attitude and understanding of the impact design and technology has on our lives and the wider world
- understand that design needs to have a purpose and user
- gain an understanding of nutrition and prepare healthy meals

In EYFS pupils develop their understanding of Design and Technology through the planning and teaching of 'Expressive Arts and Design: Creating with Materials'. The children are provided with a careful balance of teacher-led and pupil-initiated learning opportunities that allow them to:

- safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function
- share their creations, explaining the process they have used
- make use of props and materials when role playing characters in narratives and stories.

In Key Stages 1 and 2, Design and Technology is taught in half-termly blocks in discrete lessons which have been carefully planned to allow pupils to make connections with prior learning and new learning. Pupils explore key aspects of research and design before creating and subsequently evaluating their products. These projects allow pupils the opportunities to:

- Research and design a product, identifying its purpose and end user
- Make the product, selecting the appropriate materials, tools and processes

- Evaluate the product using products of key designers for comparison and listen to the views of peers
- Develop and apply their technical knowledge

Our expectation is that the majority of pupils will move through the programmes of study at broadly the same pace with learning always starting from the children's prior knowledge. From this, units of work can be personalised to the needs of the children.

Impact

All pupils will achieve their age-related expectations at the end of each key stage. We are developing a new assessment system and we will then be able to measure progress.

Early Learning Goal	Expressive Arts and Design: Creating with Materials	Expected Standard
Key Stage 1	(Years 1-2)	Age Related Expectations
Lower Key stage 2	(Years 3-4)	Age Related Expectations
Upper Key Stage 2	(Years 5-6)	Age Related Expectations

2022 – EYFS – 100% at or above achieved the expected standard with 94% making expected or better progress

2022 – KS1/KS2 – 91% working at or above age related expectations

Pupils at Sacred Heart will be confident in researching, comparing and evaluating their work and that of other designers.

Studying Design and Technology will enable pupils to understand the impact design has on the world around them. Pupils will be creative and able to apply their skills, knowledge and understanding across many disciplines.

Pupils will take part in events in school and linked to Design and Technology.

Content:

The **Design and Technology – National Curriculum 2014** document outlines the content of the Design and Technology Curriculum that is taught in school, and this should be read in conjunction with the School's Termly Curriculum Outlines, as these provide more detailed information of how these topics are taught.

If you were to walk into lessons at Sacred Heart, you would see:

- A wide range of research being used to engage pupils and provide greater knowledge and understanding of the topic being studied. The lessons draw upon a combination of knowledge and skills needed so that pupils can use their prior knowledge and understanding to help them further their learning. Pupils are taught the skills required to handle equipment safely and use it correctly.
- The correct Design and Technology vocabulary being used and developed – pupils have vocabulary available to them through word mats and PowerPoints. Pupils are encouraged to refer back to the key terminology and become increasingly

independent in using and applying the correct terminology to demonstrate their understanding of a topic.

- The pupils speaking, listening, reading and writing skills being developed to enable them to become clear, effective communicators around their knowledge, understanding and skills.

What pupils say about Design and Technology at Sacred Heart:

Year 1

Year 1 like designing and making.

Year 1 like to stick and make lots of things.

Year 1 enjoyed creating their castles and palaces.

Year 1 enjoyed making a lever for a door.

Year 1 found that thinking about and looking at real castles and palaces helped them.

Year 1 have found having success criteria from the teacher a challenge.

Year 1 have enjoyed making new things.

Year 2

I enjoy designing my product before I make it. Even if it changes it's still good.

I enjoy making things because you get to be creative.

When you stick things together, it ends up looking so much better than you thought.

I got better at sewing when we made hand puppets.

I have got better at cooking, I don't get shell in the egg anymore.

I have got better at baking – I have never made Jewish Challah bread before.

Cooking has helped me and I can do it at home now.

Making stuff helps me, now I can design my own creations like an architect.

Sewing is challenging, it is hard to go in and out of the holes.

I like when we paint and decorate. You can choose how your product looks.

Our favourite project was making challah bread as part of Judaism week.

Year 6

Year 6 have enjoyed group work and being able to be creative.

They enjoyed making Mayan food and tasting it.

Year 6 liked making their own 'Make do and mend' bears.

Year 6 were proud of their success when sewing the teddy bears together with the stuffing inside.

They were pleased with their cooking of the Mayan tortillas

They have found small step teaching has improved their learning in Design and Technology.

They have also been helped by Peer to Peer support.

I found the 'Design' element challenging having to draw my product accurately so I knew how to, and could, make it.

Year 6 also found some of the more intricate sewing tricky.

Year 6's favourite aspect of Design and Technology this year has been getting to have a go at new skills and designing something 'I didn't think I could possibly make'.

