

Sacred Heart Primary School Design and Technology Policy

Mission Statement

Our mission is to create a harmonious community where each individual is a valued member who may ~ Grow in Love ~ enriched by the teaching and doctrines of the Catholic Church.

INTRODUCTION AND AIMS

At Sacred Heart we recognise that Design and Technology, in accordance with the National Curriculum, should ensure that the children progress, through evaluation of past and present design and technology, in developing a critical understanding of its impact on daily life and the wider world.

This teaching must provide opportunities for children 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. Design and technology enables children to acquire a broad range of subject knowledge and apply their cross-curricular knowledge such as mathematics, science, engineering, computing and art.

Design and technology is an important part of the National Curriculum. When children leave education, we hope they will be able to take risks and become resourceful, innovative, enterprising and capable citizens who recognise and appreciate the essential contribution that high-quality design and technology makes to the creativity, culture, wealth and well-being of the nation.

OBJECTIVES

The National Curriculum focuses on many different areas of learning within Design and Technology as a subject. The children will be taught to know, apply and understand the matters, skills and processes required in each area of the Design and technology curriculum Our objectives are to:

- 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;
- gain a knowledge and understanding of materials, components, controls and structures;
- use focused practical tasks to develop skills, techniques and knowledge, particularly those related to tools and materials;
- have the opportunity to investigate, disassemble and evaluate a range of simple products which are found in everyday life;
- experience a sense of achievement having worked through the design process that cumulates in a finished model.

CURRICULUM CONTENT

The Design and Technology Curriculum is based on the guidance from the National Curriculum. The school uses a cross curricular approach to encourage immersive learning. Topics for each year group are chosen from the National Curriculum based on this cross curricular approach. Design and Technology is taught for one lesson a week on an alternate half termly rota between Design and Technology and Art and Design.

PLANNING

As a whole school we follow the guidance from the National Curriculum and use our cross curricular approach to plan and deliver lessons. Careful consideration is given to the knowledge, skills and understanding that the pupils need to acquire before moving onto the next phase of their education.

Teachers know their children's prior learning, and are mindful of their own end points in relation to the expectations contained in subsequent years. A coherently planned and sequenced set of lessons is taught using our progression of knowledge and

skills document which consistently builds on previous understanding to embed key concepts and skills in the long-term memory. This repetitive approach ensures that knowledge, skills and understanding builds progressively from every year group providing purposeful repetition, consolidation and challenge to ensure the progressive development of new concepts, knowledge and skills.

Teachers create long, medium- and short-term plans focused on the cross curricular approach per each half term.

Lessons will build on the learning experiences and concepts and skills across the key stages to provide continuity and progression of learning. Children have opportunities to revisit, apply and extend what they have already covered to ensure that learning is both cumulative and permanent. We believe that this is the best way for children to develop the knowledge and skills needed for mastery of a subject.

LONG TERM PLANNING

Long term planning is based on establishing a clear progression of knowledge, skills and understanding that develop children who are able to think critically and problem solve who value the contribution Design and Technology makes to the lives of everyone.

MEDIUM TERM PLANS

Teachers follow medium term plans for each topic. These plans provide learning objectives and activities which the individual teachers can then adapt to meet the needs of their class.

A copy of the medium-term plans are saved on StaffShare in the Design and Technology folder.

SHORT TERM PLANNING

Short term plans are created by the class teacher from the medium-term plans, to match the needs of their pupils and are linked to the National Curriculum objectives and learning outcomes.

DESIGN AND TECHNOLOGY IN THE EARLY YEARS (EYFS)

In Nursery and Reception, all children are taught Design and Technology as an integral part of the learning covered during the academic year. All Design and Technology objectives within the EYFS are underpinned by the objectives of the early learning goals (ELGs):

- Know some similarities and differences between things in the past and now, drawing on their experiences and what has been read in class.
 - ELG: Understanding the World, Past and Present
- Use a range of small tools, including scissors, paint brushes and cutlery. Begin to show accuracy and care when drawing.

- ELG: Physical, Fine Motor skills
- 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.

ELG: Expression Arts and Design, Creating with Materials.

In planning and guiding children's activities, teachers constantly reflect on the different ways that children learn and this is seen in their practice. It allows the teaching staff to provide all children with rich creative and imaginative opportunities through playing, exploring and active learning. Children are continually encouraged to make meaningful connections in their learning.

DIFFERENTIATION

As with all other areas of the curriculum, the purpose of differentiation in Design and Technology is to:

- Enable children to succeed in a set task or activity.
- To challenge children beyond their comfort zone.
- To enable children to recognise their achievements and celebrate these.

Differentiation in teaching and learning activities takes many other forms e.g. open-ended questions, activities which take account of different learning styles, adapted resources and support materials, LSA support, pupils paired with learning partners, extension activities for more able pupils.

ADDITIONAL EDUCATIONAL NEEDS

Our school curriculum policy states that we provide a broad and balanced education for all our children. When teaching Design and Technology, we ensure that we provide learning opportunities matched to the needs of children with additional learning needs.

CULTURAL CAPITAL

Children regularly access a range of resources to acquire learning through online research, books, artefacts, pictures and photographs. Teachers provide vital opportunities for children to enhance their cultural capital by integrating their knowledge across a range of learning opportunities and using the skills developed to apply this to the real-life world.

ASSESSMENT

INFORMAL ASSESSMENT

This takes place in many forms including general classroom observation, contributions to classroom discussions, pupil self-assessment e.g. topic mind maps, peer assessment e.g. response partners, contribution to classroom displays, items created and marking of formal work in Design and Technology books.

MARKING

Marking pupils' work will be approached positively so that it celebrates success and encourages future learning. Marking in Design and Technology follows the school's marking policy. Teacher's use a 'star' to identify successes against the learning objective and 'a wish' to extend the learning and challenge the children to a deeper understanding. The children respond to marking in green pen.

FORMAL ASSESSMENT

Half termly assessments will be recorded for each pupil in each year group. Teacher's use specific topic criteria to judge whether a pupil is Working Towards, Working At or Working at Greater Depth. They assess the pupils with particular focus on knowledge, understanding and skills.

At the end of the year the overall assessment of each pupil is recorded.

Moderation of work takes place at staff meetings, where pupils books are shared and judgements are agreed.

DIGITAL LEARNING

We have an interactive whiteboard in every classroom, iPads and a very well-equipped IT suite which is used to enhance Design and Technology teaching and learning.

The children find, select and analyse information, using the internet and through the use of software such as PowerPoint, Publisher, Word, Graphic Design programs etc.

Staff are supplied with links to useful Design and Technology websites.

HEALTH AND SAFETY

Teachers must complete risk assessment for any enrichment visits, and give due consideration to the safe use and storage of resources and artefacts that they use to support their teaching of Design and Technology.

Any broken, damaged or dangerous resources should be brought to the attention of the Design and Technology Coordinator.

MONITORING

The level of teaching and learning in Design and Technology will be monitored through:

- Book checks
- Monitoring of plans
- Learning walks
- Level analysis
- Work moderation
- Pupils and staff questionnaires

STAFF AND SUPPORT

At present all the teachers responsible for classes teach Design and Technology to their children. Design and Technology is supported by the Design and Technology co-ordinator who works closely with the Art and Design co-ordinator and other Design and technology leads through subject leadership meetings.

Training opportunities are available to all members of staff.

The Design and Technology co-ordinator provides INSET training for Staff on areas for development and new initiatives.

RESOURCES

There is an annual budget provided for which Design and technology is in line with the amount provided for foundation subjects.

Design and Technology resources are kept in a locked cupboard on the KS2 corridor, individually in the relevant year groups 'eaves' cupboards or in the Art and Design eaves storage.

Design and technology resources include a range of books, tools and construction materials.

Foundation Stage has its own resources within the Reception class area. The School Library also contains a variety of Design and Technology related books for pupils to borrow.

REVIEW AND DEVELOPMENT

This is initially the concern of the Headteacher and the Design and technology co-ordinator. It is then looked at by the staff as a whole. Occasionally this may be reversed and the staff may come together as a group to discuss new developments.

The Design and technology co-ordinator meets annually with the Headteacher as part of a review and consultation process.

The Design and technology policy will be annually reviewed and updated where appropriate.