SACRED HEART CATHOLIC PRIMARY SCHOOL & NURSERY

Design & Technology Policy

This is our school.

Together we worship; Together we learn; Together we belong.

With the love of God, our dreams and ambitions come true

September 2023

Policy Date: September 2023

Policy Status: Statutory Policy

Awaiting approval by Governing

Body October 2023

Review Cycle: 18months or as required

Next Review Date: January 2025

At Sacred Heart Catholic Primary School & Nursery we are proud to provide a safe, stimulating and inclusive learning environment where every member of our community is valued and respected.

Mission Statement
**'Together we worship, Together we learn,
Together we belong –   with the love of God…
our dreams and ambitions come true.'**

Our broad, balanced, creative curriculum and enrichment activities provide opportunities for everyone to achieve and succeed. Together we take pride in making a positive contribution to our school and the wider community.

This policy should be referred to in conjunction with the curriculum, assessment and teaching and learning policies.

SAFEGUARDING STATEMENT

"Sacred Heart Catholic Primary School is committed to safeguarding and promoting the welfare of children and young people and expects all staff and volunteers to share this commitment".

The National Curriculum for Design and Technology aims 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. Children will design and make a range of products. A good quality finish will be expected in all design and make activities appropriate to the age and ability of the pupil. The work covered in each year group ensures a balance of:

• investigative, disassembly and evaluative activities,

• focused practical tasks, designing and making assignments.

Intent

At Sacred Heart Primary School, we aim to provide children with a DT education that is relevant in our rapidly changing world. We want to encourage our children to become problem solvers who can work creatively on a shared project. We believe that high-quality DT lessons will inspire children to think independently, innovatively and develop creative, procedural and technical understanding.

Our DT curriculum provides children with opportunities to research, represent their ideas, explore and investigate, develop their ideas, make a product and evaluate their work. Children will be exposed to a wide range of media including textiles, mechanical structures, cooking and nutrition; through this, children will develop their skills, vocabulary and resilience.

Implementation

At Sacred Heart Primary School, we have a clear and comprehensive scheme of work in line with the National Curriculum. As the EYFS Framework forms the foundation of our curriculum, we provide pupils the opportunity to develop their skills continuously with access to the creative area during provision. Children's interests are captured through their learning projects, ensuring that links are made in a cross curricular way and also linking to our school values, giving children motivation and meaning and resilience for their learning. Language rich environments encourage

respectful shared talk and explanations about their ideas and creations. This allows the children to have more ownership over their curriculum and lead their own learning in Design Technology. English, Maths and ICT skills are taught during discrete lessons but are revisited in Design Technology so children can apply and embed the skills they have learnt in a purposeful context.

Impact

Our DT Curriculum at Sacred Heart Primary School is developing to provide well thought out lessons and topics that demonstrate progression. As designers, children will develop skills and attributes they can use beyond school and into adulthood.

In addition, we measure the impact of our curriculum through the following methods:

- reflection on standards achieved against the planned outcomes;
- assessment and moderation of those standards at the end of each term.
- pupil discussions about their learning, which includes discussion of their thoughts, ideas, processing and evaluations of work.
- pupils use of technical DT vocabulary
- pupils being able to reflect on their knowledge and further develop their ideas.
- work collaboratively and practically to investigate and experiment
- achieve age related expectations in Design Technology at the end of their cohort year.

'High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.'
DFE, National Curriculum

Teaching and Learning

Design and Technology is taught as a subject specific activity through a combination of whole class teaching, group work and individual work. Cross-curricular links are identified when appropriate. e.g. The children can apply scientific and mathematical knowledge to create products which are functional.

English

Design and Technology contributes to the teaching of English in our school by encouraging children to make learning links, ask and answer questions about the starting points for their work. They have the opportunity to compare ideas, write methods and approaches in their own work and that of other children, and to say

what they think and feel about them. Evaluations encourage the pupils to critique their own work in order to improve their design ideas.

Mathematics

Design and Technology contributes to the teaching of mathematics in our school by giving opportunities to develop the children's understanding of shape and space through work in two and three dimensions. The use of measure to ensure that the correct proportions of materials are used.

Computing/ICT

We use ICT to support Design and Technology teaching when appropriate. Children use software to explore shape, colour and pattern in their work. Older children collect visual information to help them develop their ideas by using digital and video cameras to record their observations. Children use the internet to find out more about famous designers and engineers. We also have a Virtual Learning room, 'The Immersive Room' where children can be immersed and inspired by a wide range of visual/audio stimuli as a starting point/progression in thought and ideas within design and technology.

Whilst making links with the local community, we have been able to provide our pupils with the chance to use high specification equipment. The use of a 3D printer has brought the pupils' designs to life and the pupils have been able to make scale models to support their design process.

Personal, social and health education (PSHE) and citizenship

We encourage the children to develop a sense of responsibility in following safe procedures when making their designs. They also learn about health and healthy diets. Through their understanding of personal hygiene, they apply this to learning about food hygiene.

Spiritual, moral, social and cultural development

Our groupings allow children to work together and they understand how we expect them to do this. Collaborative work in Design and Technology promotes respect for the abilities of others and a better understanding of themselves. In addition, they develop a respect for the environment, for their own health and safety and that of others. They learn to appreciate the value of similarities and differences. A variety of experiences teaches them to appreciate that all people are equally important. Practical activities provide the children with a range of contexts allowing safe exploration of the world without the need to master facts and theories.

Planning

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• investigative, disassembly and evaluative activities,
• focused practical tasks,
• designing and making assignments.

The schemes of work are developed using recommendations from the Design and Technology Association, ensuring the National Curriculum objectives are met by interesting and engaging projects. They are consistent with the National Curriculum requirements and should be applied whenever children are designing and making products:

• **User** – children should have a clear idea of who they are designing and making products for, considering their needs, wants, interests or preferences. The user could be themselves, an imaginary character, another person, client, consumer or a specific target audience.

• **Purpose** – children should know what the products they design and make are for. Each product should perform a clearly defined task that can be evaluated in use.

• **Functionality** – children should design and make products that function in some way to be successful. Products often combine aesthetic qualities with functional characteristics. In D&T, products must have more purpose to them than aesthetics, therefore functionality must be considered in all phases of the design process.

• **Design Decisions** – when designing and making, children need opportunities to make informed decisions such as selecting materials, components and techniques and deciding what form the products will take, how they will work, what task they will perform and who they are for.

• **Innovation** – when designing and making, children need some scope to be original with their thinking. Projects that encourage innovation lead to a range of

design ideas and products being developed, characterised by engaging, open-ended starting points for children's learning.

• **Authenticity** – children should design and make products that are believable, real and meaningful to themselves i.e. not replicas or reproductions or models which do not provide opportunities for children to make design decisions with clear users and purposes in mind. We create 'something, for somebody, for some reason'.

In Early Years Foundation Stage, Design and Technology is an integral part of topic work, relating aspects of the children's work to the objectives set out in the Early Learning Goals, in the 'Understanding of the World' and Expressive Arts and Design areas of learning. To facilitate our objectives, different teaching styles and methods are used as appropriate. These include small group and individual work.

Inclusion

We teach Design and Technology inclusively to all children regardless of background or ability. Design and Technology forms part of our school curriculum policy to provide a broad and balanced education for all our children. Our teachers provide learning opportunities that are matched to the needs of all children and take into account the targets set for individual children in their Child Action Plans (CAPs), this will include a range of multisensory teaching and learning support strategies. We utilise a range of simple tools and equipment to support and develop independence such as bespoke folding blocks and bench hooks.

Assessment

The children's curriculum workbooks are a good source of evidence of good practice. On-going, formative assessment, both during and at the end of each unit, informs summative assessments. Areas of success and next steps are shared with the children.

Teachers assess work in Design and Technology by making observations of the children working during lessons. They record progress made against the learning objectives for that lesson. At the end of a unit of work, children undertake a review of their work that focuses upon an evaluation of the finished product and an overview of the various tasks undertaken. Through our assessment and tracking system, children's progress is monitored with a final attainment assessment given at the end of each year. An annual report to parents' details progress and achievements made in Design and Technology. Each teacher passes this information on to the next teacher at the end of each year.

Due to the practical nature of Design and Technology, evidence of work undertaken by children can be in the form of pupil Design and Technology Planners, display or as a photographic record. Samples of the design process and end product are also valuable evidence. The Design and Technology subject leader can

review evidence of the children's work in their curriculum books and on class Twitter pages.

Resources

Funding for Design and Technology will be within the school budget plan for each financial year. This budget will cover staff training, the purchase of equipment such as tools, construction kits, consumable materials, books and other resource materials. The Subject Lead will be responsible for ordering equipment and materials related to the theme. It is the responsibility of each class teacher to identify additional resource needs in relation to their project.

Equipment and materials have been organised in the central store. This will be maintained by the Design and Technology subject lead supported by support staff as required. Any shortages, breakages or losses should be reported immediately to the Design and Technology subject leader.

Monitoring

The monitoring of the standards of children's work and of the quality of teaching in Design and Technology is the responsibility of the subject lead. Pupil progress and pupil's voice is monitored throughout the academic year. The work of the subject lead also involves supporting colleagues in the teaching of Design and Technology being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school.