



Our Lady and St Philomena's Catholic Primary School Design and Technology Policy

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RATIONALE

The Design and Technology curriculum at Our Lady and St Philomena's develops the potential of each child to design and make things, to solve practical problems and meet individual needs. It provides a balance in which the creative and practical capabilities of pupils can be developed and inter-related.

"Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education offers an essential contribution to the creativity, culture, wealth and well-being of the nation." (National Curriculum 2014)

Curriculum Intent

Design and Technology (D&T) enables children to actively contribute to the creativity, culture, wealth and well-being of themselves, their community and their nation. It allows them to gain 'real-life experiences' and encourages them to become independent, inquisitive problem solvers and thinkers as individuals and part of a team. D&T gives children the skills and abilities to engage positively with the designed and made world and allows them to harness the benefits of technology. Through the study of D&T, children combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industry. We aim to, wherever possible, link work to other disciplines such as mathematics, science, computing and art. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and are encouraged to become innovators and risk-takers.

In the EYFS and Infants, the main aims are to enjoy D&T, learning the basic skills and techniques to be built upon as they progress through school. We encourage them to develop their curiosity, begin to design purposeful, functional, appealing products, learn about the importance of nutrition and help them to generate, develop, model and communicate their ideas through talking, drawing, templates, and, where appropriate, information and communication technology.





As pupils progress, they learn to be able to think critically and develop a more rigorous understanding of D&T. They build on their existing knowledge and apply their knowledge and understanding in real-life contexts, relating it to the world around them and appreciating the work that goes into creating magnificent products.

By the end of KS2, we want our children to leave our school with a wide range of Design and Technology skills, developed through positive experiences.

Curriculum Implementation

Through focused teaching, Our Lady and St Philomena's endeavours:

Class teachers are supported in a range of ways:

- A subject leader with developing experience.
- Medium term plans that complement the topics taught in each year group as well as covering the necessary skills.
- Knowledge organisers.
- CPD to be cascaded through staff.

A curriculum which ...

- Is carefully planned to build and deliver new skills, knowledge and appreciation and techniques.
- Has a strong focus upon developing skills.
- Develops children's curiosity and enquiry, learning to examine, question and analyse.
- Develops pupils understanding of why we study D&T.
- Understanding the contribution that people, events and Design movements have made to our way of life now.
- Is inclusive and considers all religions, race, cultures, age, abilities and gender.

In KS1 this looks like:

Design:

- Design should be rooted in real life, relevant contexts to give meaning to the learning.
- Planned through appropriate formats: drawing, templates, talking and mock-ups.

Make:

- Children should be given a range of tools for their projects to choose from.
- Children should use a wide range of materials and components; textiles, construction equipment and ingredients.

Evaluate:

- Evaluate existing products.
- Evaluate their own products against design criteria.





In KS2 this looks like:

Design:

- Rooted in real life, relevant contexts to give meaning to the learning.
- Researched designs based on functional, appealing products with purpose.
- Planned by appropriate methods; annotated sketches, cross-sectional diagrams, prototypes, pattern pieces and computer aided design

Make:

- Children can select from a wider range of tools than KS1.
- Children should use from and select a wider range of materials and components; textiles, construction equipment and ingredients.

Evaluate:

- Evaluations should be in comparison to existing products.
- Children should evaluate against a design criteria.
- Children should understand how key events and individuals have helped shape design and technology globally products are in context.

Curriculum Impact

Termly assessment is carried out by staff to measure the progress of students within a year group and across year groups and to identify those pupils who made need extra support. The progress statements for the subject are set out in the form of a ladder matched to year group expectations so that teachers can easily identify what pupils need to achieve to move to the next step.

We want our pupils to become independent learners and encourage them to read about and research the architects, engineers and designers that they learn about in school.

We use Design and Technology to raise the aspirations of our pupils and encourage them to be ambitious in their future lives. We want our pupils to set themselves very high aspirations and constantly remind them of the further education and career prospects that are open to them if they succeed in this subject.

People who have studied Design and Technology at further education often find a career in the following areas of employment:

- Engineering
- Architecture
- Information Technology
- Hospitality
- Education
- Craft designers: Include silversmiths, potters, instrument makers and weavers
- Fashion designers: Create new clothing and accessories for brands and design houses.
- Interior designers: Design inside spaces such as shops, offices, museums and hotels.





THE IMPACT OF DESIGN AND TECHNOLOGY

Children have become more confident in demonstrating the new skills they have learned.

D&T has been developed as a discreet subject, developing skills, vocabulary and understanding of techniques, as well as a supporting subject with cross-curricular links to most subjects. Children are learning how it enriches the world around us.

The children are enthusiastic about the subject and demonstrate high levels of enjoyment throughout the school.

In our school, we enable pupils to record from first-hand experience and from imagination, and to select their own ideas to use in their work. They are given opportunities to develop creativity through a range of increasingly complex activities. Opportunities are afforded to improve children's ability to control materials, tools and techniques. We also aim to increase their critical awareness of art and design in different times and cultures. We also aim to foster an enjoyment and appreciation of visual arts and a knowledge of famous artists, craftspeople and designers.

We recognise that there will be children of different ability in all classes and we provide suitable learning opportunities for all by matching the challenge of the task to the ability of the individual child through: setting tasks that are open-ended and can have a variety of valid responses; increasing the difficulty of a task if the teacher feels that a child can respond positively to that; provide a challenge in the range of resources offered; offering extra adult support.

How do I know I am better at D&T now than I was?

Children are encouraged to regularly review their emerging skills and successes.

They are encouraged to recognise their own personal development and skills they now have that they did not when they were younger.

Assisting a peer with a skill or technique because they have mastered it.

The areas outlined in the national curriculum and target tracker enable children to see how they are progressing. However, the practical aspects of the subject focus on children experimenting and through this, developing skills, techniques and knowledge and understanding of how, why and reasons for their choice of design. This builds children's progress and ability but at differing speeds. Progress expected ranges from understanding how to use different tools and materials for various purposes in planning executing and evaluating to detailed designs incorporating a range of skills.

DESIGN & TECHNOLOGY CURRICULUM PLANNING

The Design and Technology curriculum is reviewed annually.

Our long term planning takes the form of a curriculum map detailing the units of work for each term in the form of a question to facilitate discussion and develop critical thinking skills.

Our medium term plans provide details of each unit for the term and define what the pupils will learn ensuring an appropriate balance and distribution of work across each term. They will also include





what teachers should revise from previous years. The subject leader will monitor and review these plans.

Teachers will facilitate individual lessons to specific learning objectives, explaining where each lesson fits in with the rest of the unit and to previous learning in other year groups. Activities are planned to build on previous learning so as to give every pupil the opportunity to develop their skills, knowledge and understanding of art and design, make progress and face an increasing challenge in the subject as they move through year groups.

ASSESSMENT

Teachers assess pupils by observing them during lessons and intervene to address misconceptions at the earliest opportunity. They use the information gathered during such observations to inform their planning for the next lesson.

Children are encouraged to assess and evaluate their own work throughout units. This helps them to appreciate how they can improve their performance and set targets for themselves for the future.

We assess pupils' learning which is specific to Design and Technology on a termly basis by reference to the "progress ladder" which has been devised by the subject co-ordinator and the SLT. It is important to know that learning has progressed from pupils starting points at the beginning of topics and from year to year. Information is passed on to the next teacher at the end of each year and is reported to parents in the end of year report.

The subject leader will keep evidence of children's work in a portfolio to demonstrate the expected level of achievement in Design and Technology in each year group.

PUPIL VOICE

Pupils have been involved in the creation of this policy through discussions with the school council. They are involved in the delivery of each topic when teachers explore the pupils' prior learning at the beginning of new topics.

INCLUSIONS AND DIFFERENTIATION

We respect pupils' unique starting points and we teach Design and Technology to all children, whatever their ability and individual needs. 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 children with learning difficulties. We strive to meet the needs of all pupils with special educational needs, disabilities, special gifts and talents, and of those learning English as an additional language.

When the performance of a child falls significantly outside the expected range and they have special educational needs, we assess the needs of each pupil and take action to enable the child to learn as effectively as possible. Intervention through Quality First Teaching or support plans will be put in place. This may include





targets specifically related to performance in Design and Technology, and the teacher will pay attention to these and other learning targets when planning lessons.

MONITORING AND REVIEW

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 leader. The work of the subject leader also involves supporting colleagues in their teaching, being informed about current developments in Design and Technology, and providing a strategic lead and direction for this subject in the school. The subject leader reviews and evaluates the action plan, budget, planning and work books annually.

This policy will be reviewed annually.