



## **St Anne's Catholic Primary School**

### **Design and Technology Policy**

#### **1 Introduction**

Design and Technology (DT) 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, computing and art. Through the evaluation of past and present design and technology, pupils develop a critical understanding of its impact on daily life. This may happen through individual or group experimentation and discussion. Six interrelated principles have been agreed by the National Curriculum (NC) expert group for DT and these are:

- User
- Purpose
- Functionality
- Design Decisions
- Innovation
- Authenticity

#### **2 Aims**

Children will have opportunities to:

- Develop the creative, technical and practical expertise needed to perform everyday tasks confidently;
- Be effective at selecting or generating strategies to solve problems;
- 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;
- Recognise opportunities, take risks for a purpose, operate outside their 'comfort one', learn from mistakes and dare to do things differently when making design decisions;
- Build structures, explore how they can be made stronger, stiffer and more stable;

- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided designs
- Understand and apply the principles of nutrition and learn how to cook.

### **3 Content**

We use a skills based cross-curricular approach to teaching and learning, using objectives taken from the NC. We teach DT skills discretely and throughout curriculum themes, ensuring all children access all areas of the DT curriculum. To meet the requirements of the NC it is essential that each teacher carries out the following DT activities within a year:

- Mechanisms
- Textiles
- Food
- Structures

Children will also acquire and apply knowledge and understanding of:

- Engaging in a problem solving process;
- Selecting from, and using a range of tools, equipment, materials and components to perform practical tasks;
- Evaluating their ideas and products against design criteria;
- Structures (construction that can withstand load);
- Existing products (investigating products to see form, materials and structure);
- Quality (how well an object is made and fulfils its purpose);
- Matters, skills and processes specified in the relevant programme of study;
- Relevance of D&T to the wider world;
- Principles of nutrition through progressing to energy and nutrients, diet and health, and nutritional needs throughout life;
- Mechanisms and control systems (wheels, axles, joints);
- Health and safety (following simple safety rules when working with tools and materials).

### **4 Progression**

- 4.1 The Early Years Foundation Stage (EYFS) provides an important foundation for the development of DT capability. It extends and broadens the child's home experience, enabling the child to explore a wide variety of materials: sand, water, construction



kits, food, paper, wood, textiles, play dough, plasticine, reclaimed materials etc., and to develop skills with simple tools. Some of these experiences will be structured and the children will be encouraged to talk about their observations and ideas with the adults working with them.

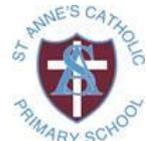
- 4.2 Throughout the school, children's design and technology capability will be developed cumulatively. Learning from previous key stages should be revisited in teachers' planning and practice and used in a more sophisticated way in subsequent key stages within the framework outlined in the NC Programmes of Study.
- 4.3 Work will be planned with reference to the Design and Technology Progression Framework as well as 6 School Curriculum Principles. Each principle should be evident in each project that pupils undertake.
- 4.4 The attainment of pupils should match the statements for their age and this should be reflected in teachers' planning. Where some pupils are working towards the expectations for their age or exceeding these expectations, curriculum planning should show how additional support or challenge will be provided in order to meet their needs.
- 4.5 Starting points for design and technology activities in the Early Years Foundation Stage emerge from a variety of starting points such as the class theme, imaginative play, visits, story or real problems and needs encountered in the classroom and outdoor environment.
- 4.6 In Key Stage (KS) 1 and 2 pupils will be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. Children in KS2 will be taught to be 'innovative'; to use the new computing curriculum to programme and control their products, and to understand the concept of mechanical and electrical 'systems'.
- 4.7 By the end of each KS, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

## **5 Assessment and Recording and Monitoring**

- 5.1 Assessment can take the form of monitoring children's discussions, questions and answers with individuals or groups, and marking end products.
- 5.2 Teachers will apply formative assessment system to report on the essential knowledge, understanding and skills that all pupils should learn.

## **6 Equal Opportunities**

- 6.1 In accordance with the school's current equal opportunities policy attention should be given to ensure that each child regardless of race, gender or ability should receive all aspects of the design and technology curriculum although it may sometimes be appropriate for children to have differentiated work, longer or shorter sessions or work in groups of a selected nature.



- 6.2 Staff should be aware of and sensitive to medical conditions (e.g. allergies) and different beliefs and practices within the local community which might affect children's work with food, materials or design.

## **7 Health and Safety**

- 7.1 Safety is of paramount importance in DT. It is the teacher's responsibility to be aware of safety issues in all DT activities by:
- Providing a safe working area (furniture, materials storage, tool maintenance);
  - Teaching and implementing safety rules and good practice, including hygiene;
  - Ensuring the safe and correct usage of tools and materials;
  - Ensuring working areas are kept clean and tidy;
  - Considering storage of partially completed work;
  - Ensuring the correct disposal of waste
  - Carrying out risk assessments prior to undertaking D&T projects.
- 7.2 The teacher is responsible for ensuring that children are adequately supervised when using tools and that other adults working in the classroom understand safety rules and maintain safety standards.
- 7.3 Safety rules and safety issues should be taught to all children.

## **8 Resources**

- 8.1 Resources are generally stored in the music room. Tools and materials for specific units are stored in labelled boxes in the DT cupboard. General resources such as construction card, fabrics etc are accessibly stored on the cupboard shelves while larger materials such as balsa wood are stored on top of the DT cupboard.
- 8.2 It is the responsibility of the class teachers to be aware of the resources needed for a particular unit and to ensure that they are made available in consultation with the DT Leader in advance of use.



## **9 Related policies**

9.1 See also:

- Assessment;
- Equal Opportunities;
- Health and Safety;
- Marking and Feedback;
- More Able;
- SEND;
- Teaching and Learning
- Art

<b>Date agreed by Governing Body on</b> 21/06/2022	<b>Signature of Chair or Vice Chair</b>
<b>Date agreed for review</b> Summer 2025	<b>Frequency of Review</b> Three Years
<b>Responsibility for Review</b> A&C Committee	