

St Anne's CE (Aided) Primary School



# **Design and Technology Policy**

## **Our School Vision**

St Anne's CE (Aided) Primary School is a happy vibrant school where diversity and individuality are celebrated. We are passionate in our pursuit of excellence in all aspects of school life. We nurture and inspire children to develop confidence and resilience in an environment where efforts are valued and all children flourish.

## **Rationale**

This policy reflects our school's commitment to an inclusive, creative and exciting curriculum, based on our Quality First Teaching Commitment. We believe that Design Technology makes a valuable and distinctive contribution to children's education. Learning about past and present design technology helps pupils understand and contribute to the world in which they live.

## **Purpose of Study (National Curriculum 2014)**

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 makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

## **Aims**

The national curriculum for DT 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.

## **Knowledge and Understanding**

The children's knowledge in DT will be broadened through applying their understanding of how to strengthen, stiffen and reinforce structures. They will understand and use mechanical and electrical systems in their products. They will apply their understanding of computing to programme, monitor and control their products. Children will understand and apply the principles of a healthy and varied diet through learning about cooking and nutrition.

## **Subject Content**

### **EY**

#### ***Understanding of the World***

##### **Technology**

Children recognise that a range of technology is used in places such as homes and schools • They select and use technology for particular purposes.

## ***Expressive arts and design***

### Exploring and using media and materials:

Children safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

### **Key Stage 1**

Through a variety of creative and practical activities, children will be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They will work in a range of relevant contexts.

When designing and making, children will be taught to:

- ① Design
- ① Make
- ① Evaluate
- ① Use technical knowledge

### **Key stage 2**

Through a variety of creative and practical activities, children will be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts.

When designing and making, pupils should be taught to:

- ① Design
- ① Make
- ① Evaluate
- ① Use technical knowledge

## **Design and Technology Curriculum Implementation**

At St Anne's a topic-based approach to curriculum planning is employed within the school. The teaching of DT is organised through half-termly topics.

We start with the DT: Progression in Knowledge, Skills and Understanding- Appendix 1

Coverage is balanced with an enquiry based approach to teaching and learning. Opportunity is given for study "in depth" in each half termly plan (MTP). Across each Key Stage, half termly plans provide opportunities to go on visits and work with external professionals.

Children should be taught procedures and skill in using sources and gradually make more independent studies using these materials. Children should have experience of different areas including electrical and mechanical components, stiff and flexible materials, textiles and cooking and nutrition.

Children should learn about attitudes and ideas of DT, in the past and present, and reflect upon them in debate, discussion and role play, recognising that we see through our own values.

### **Teaching and Learning Strategies**

Teachers should provide balance in teaching approaches and identify suitable progression in knowledge, understanding and skills across each planning stage to continue to challenge children.

Teachers should make links between units of work and encourage children to use previous knowledge in approaching new work.

Children should be given opportunity, where possible, to use ICT to communicate and handle information including simulation software.

A variety of teaching methods best suited to activities and interests of the children will be used. These may include:

- Story-telling (including theatre group visits)
- Discussion and debate.
- Individual and group investigation.
- Visual literacy (e.g. film)
- ICT
- Role play and drama
- Fieldwork, visits of site.
- Use of artefacts.

## **Resources**

Resources specific to individual topics are kept in classrooms.

## **Visits**

Visits and visitors are excellent tools to stimulate children's creativity. Appropriate visits and visitors are planned in at the beginning of a topic.

## **Assessment**

School policies on assessment and feedback apply to DT. Refer to Assessment and Feedback Policies for procedures regarding daily tasks. Assessment of DT at both KS1 and KS2 will be based on teachers' judgments and all recording should be simple and straightforward through subject specific feedback. Progress will be measured against statements given on the Progression of Knowledge, Skills and Understanding document which will allow for monitoring of progress within and across year groups.

## **Subject Leadership**

The DT Subject Leader is responsible for monitoring curriculum coverage and reviewing medium-term plans for each year group as appropriate. Monitoring of the quality of art education is carried out by the subject leader through an allocation of support and development time. The subject leader produces an annual action plan identifying targets for future action which may form part of the School Impact Plan.

## **Equality**

In accordance with the school's SEN Policy and our Quality First Teaching Commitment all children are given work suitable to their age, aptitude and ability.

Children can:

- Be helped to understand events and developments through studying the lives of individual people.
- Be taught concepts through discussion, concrete examples and practical activities.
- More able pupils may need open-ended tasks which enable them to tackle more complex issues.
- Understand more difficult concepts.
- Deepen and broaden their knowledge and understanding of area they are studying.

- Use a wider and more demanding range of sources.

DT has a big part to play in helping to remove stereotyping. It is important to be aware that there is bias in anything we do and therefore resources, particularly engineers/ crafts people studied, need to be carefully selected.

Children should be introduced to aspects of their own culture in DT. In consideration of other cultures, teachers should be careful to choose resources which reflect different aspects of society. In particular, teachers should note that “development” and “developing” are relative terms and hide a lot of assumptions. It is important to avoid ethnocentrism and prejudice.

### **SMSC and British Values**

As part of moral development, DT provides opportunities for discussion as to what is right and wrong. DT also allows opportunities for collaborative learning, enabling pupils to co-operate together.

### **CPD**

CPD is determined the needs of staff and the availability and suitability of courses offered.

### **Cross Curricular**

When and where appropriate, opportunities may arise to promote historical learning across the curriculum. This could be through links with:

- Literacy – e.g. speaking & listening, drama activities, explanation texts, instructions
- RE – e.g. telling stories
- Computing – e.g. using research tools, creative packages
- History – e.g. studying inventors, technology through the years