

# Promoting, Valuing and Celebrating Design & Technology Achievements in a Christian Setting.

*'I am the Good Shepherd; I know my sheep and my sheep know me.'* John 10:14

*"Design is intelligence made visible." -- Alina Wheeler, author*

*"You can't use up creativity. The more you use, the more you have." -- Maya Angelou, author, poet, civil rights activist*

*"A great product isn't just a collection of features. It's how it all works together." Steve Cook, Apple CEO*

## St Paul's Church of England Junior School Design & Technology Policy Statement September 2024

At St Paul's C of E VC Junior School, we believe that Design and Technology is vital to the development of all children. It is an inspiring, rigorous and practical subject. With technology changing at an ever-increasing pace, Design and Technology (D&T) plays an important part in helping children to develop an understanding of the world in which they live. Every invention starts with a simple problem; it is the use of creativity and exploration of materials and everyday objects that allows us to explore the possible solutions.

### Our Aims

At St Paul's we believe that D&T is important because when taught effectively:

- ✓ It draws on a wide range of knowledge to solve problems
- ✓ It develops an understanding of technological processes, products, their manufacture and their contribution to our world.
- ✓ It explores values and attitudes towards the 'made' world and how we live and work within it.
- ✓ It provides opportunities to engage in activities that are challenging, creative, relevant and motivating.
- ✓ It can provide enjoyment and build self-esteem.
- ✓ It enables a child to experience the sense of wonder at their ability to design and make.
- ✓ It enables children to work co-operatively with others; to engage in quality discussion and develop team building skills within a problem-solving context.
- ✓ It can develop an enterprising and risk-taking attitude

### Our Strategies

Technology is the creative application of knowledge, skills and understanding to the design and making process. The knowledge, skills and understanding will be taught through:

- ✓ Investigation, disassembly and evaluation activities (IDEAs). The children investigate and evaluate familiar products
- ✓ Focussed practical tasks (FPTs). Through these tasks pupils are taught and allowed to practise a range of skills, techniques and processes
- ✓ Designing and making assignments (DMAs). These tasks enable children to use what they have learnt and put it into practise to solve the problem set
- ✓ Evaluating. Through this, pupils reflect on the whole process to identify strengths, weaknesses and the effectiveness of their solution to the problem

### Organisation and cross-curricular links:

Whilst it is important to recognise particular skills and processes that are specific to D&T, links with other subjects are identified on the curriculum map. This allows the teaching and learning in different subjects to support one another, thereby giving pupils wider ranging opportunities and knowledge to help them solve problems. Most D&T projects will link to the year group Geography/History topic. Throughout the Key Stage, the pupils will work with a range of materials to include food, textiles, structures, mechanisms and electrical components and control. Pupils will work with all materials at least twice throughout the 4 years; progression is built into the scheme of work in order that pupils are able to build upon their previous knowledge and acquisition of skills.

Wherever possible units of work will be 'blocked'; this allows for pupils to work for extended periods of time on the DMAs without the usual time constraints. In order to facilitate high quality discussion and encourage team building skills, pupils will often work in groups (commonly 2 or 3 members) when tackling DMAs. However, some DMAs lend themselves to independent work to allow children more chance to develop their own skills.

The nature of D&T means that pupils build on skills developed through other curriculum subjects:

- ✓ Scientific skills – e.g. predicting and fair testing
- ✓ Mathematical skills – e.g. measuring
- ✓ ICT skills – e.g. making things happen with the use of control
- ✓ Art skills – use of finishing skills

### **Safety and D&T:**

Health, hygiene and safety are of key importance in D&T. Throughout the units of work the guidelines in the following documents will be adhered to:

*Somerset Guidelines*

*Make It Safe*

*Working with Food in Primary Schools*

### **Our Resources**

At St Paul's CofE VC Junior School:

- ✓ A well-equipped and well organised D&T area is provided to ensure access to a wide range of D&T equipment.
- ✓ A dedicated, equipped food technology area with various cooking resources.

### **Our Design and Technology Leader**

The member of staff responsible for the management and development of Design and Technology throughout the school is Hollie Rees as subject lead she will:

- ✓ Seek to enthuse pupils and staff about Design and Technology and promote high standards of achievement and high-quality provision.
- ✓ Advise and support staff in the planning, delivery and assessment of D&T.
- ✓ Ensure that children are given the opportunity to solve real and relevant problems within a variety of contexts.
- ✓ Manage and develop all resources for D&T.
- ✓ Monitor and evaluate D&T throughout the school, ensuring continuity and progression.
- ✓ Keep up to date with current developments by attending courses and network meetings, liaising with colleagues from other schools, and use this as a basis for staff development activities.
- ✓ Provide opportunities for our gifted and talented pupils to participate in appropriate activities.
- ✓ Continue to promote and raise the profile of D&T throughout the school.

### **Assessment, Record Keeping and Reporting**

In order to ensure continuity, progression and high standards of achievement in Design and Technology, assessment for every child will include:

- ✓ Ongoing formative assessment through observations and dialogue with children – to form basis for individual targets / 'next steps'.
- ✓ Each pupil keeps records of written work and annotated diagrams in a Geography/History book (cross-curricular links), along with photographs of stages of work and completed products. This carries forward to the next year as an ongoing record of progress.
- ✓ A summative assessment of each child's progress in D&T over the year will be provided in their end of year report, with specific reference to designing and making for each unit taught.
- ✓ Children's achievement in D&T will be matched against the Key Performance Indicators and examples kept in the subject leader's assessment portfolio.
- ✓ Pupil interviews and active work sampling with a selection of pupils across the year groups.
- ✓ The subject leader will analyse end of year data across the school to identify whether pupils' attainment is in line with the success criteria set based on National Curriculum level descriptors.

### **Parental Involvement:**

*At St Paul's CofE VC Junior School, we will encourage parental involvement by:*

- ✓ encouraging parents to attend the meet the teacher evenings
- ✓ providing Knowledge Organisers for parents and long term curriculum plans
- ✓ parent and carers will also be expected to assist their children with any homework/topics
- ✓ suitable video links and resources for use on the website

✓ support by visiting exhibitions of D&T work after school

### **Our Success Criteria**

We expect 90% of our children to attain standards in line with or above those stated in the NC level descriptors