



# Design Technology Policy

**Updated January 2022** 

### **Our Christian Vision**

# 'I can do all things through Christ who strengthens me.' Philippians 4:13

- Our children will be rooted in strong faith and academic foundations to thrive and succeed, knowing that Jesus is with them, every step of their journey.
- 2. Our **staff** will have the highest expectations and aspirations for our children, knowing that together, we can achieve anything through Christ.
- 3. Our **school** will be a place where children can grow in strength, to be unique and flourish in the presence of God.





### **Our Mission Statement**

Achieve We will ensure that our children achieve exceptionally well.

We will nurture our children to **believe** in themselves and each other.

We will create a culture of love, **care** and respect for one another.

At St. Wilfrid's, we can do all things through Christ who gives us strength.

### **Our Aims**

- 1. To provide a distinctly Christian ethos, underpinned by our Christian Values and Scripture, where children can grow spiritually and become reflective decision-makers.
- 2. To provide a 'literacy-rich' curriculum of the highest quality, that engages and challenges all children in our school community.
- 3. To provide an environment that excites and stimulates learning, fosters personal growth and responds to the individual needs of all children.
- 4. To provide a rich and broad education, with enrichment and extra-curricular opportunities, and unique experiences, that prepare our children socially and mentally for their future.

### **Our Christian Values**

Our Christian Values, which are rooted in scripture, are threaded through our school, our decision making and everything that we do.

Love is at the heart of our Christian Values and all members of our school community aim to 'live out' our Christian Values in our actions and choices.



### Intent

Our Design and Technology curriculum aims to encourage pupils to develop technical knowledge and a high level of skills in designing, making and evaluating, through a variety of creative and practical experiences. We intend for children to design and make products that solve real-life and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.

We aim to motivate and inspire children through a curriculum that engages and challenges all learners, by encouraging them to become resourceful, innovative, enterprising and capable citizens, who are prepared to take risks. We plan for children to acquire a broad range of subject knowledge, through cross-curricular opportunities e.g. mathematics, science, engineering, computing and art. Our curriculum is designed to deepen knowledge and develop transferable skills.

Our Christian Values and Distinctiveness, alongside our School Mission Statement of 'Achieve, Believe and Care', are at the heart of our curriculum and all that we do at St. Wilfrid's.

### **Implementation**

In Design and Technology, we implement an inclusive curriculum that meets the statutory requirements of the National Curriculum.

A series of exciting and stimulating lessons are planned, with clear knowledge and skills-based learning objectives and subject-specific vocabulary.

Children are encouraged to be inquisitive about the way products work. Opportunities are given to ask and answer questions, through investigating and analysing a range of existing products. This supports them to create their own design criteria. They then practise, experiment and build on new and prior technical knowledge and skills to create a prototype. Children develop their ideas through discussion, annotated sketches and diagrams, before creating their final piece. We encourage children to evaluate and refine their designs, regularly. Ownership is given to the children, through their choice of materials, components, tools and equipment, to fulfil the product's design criteria. In addition, children are taught where food comes from, the importance of a healthy and varied diet and how to prepare a nutritional dish.

Teachers assess learning in Design and Technology against knowledge and skills-based learning objectives within unit overviews. Our curriculum is delivered through highly effective 'quality first teaching'. When possible, enrichment opportunities, including cookery clubs, provide our children with rich experiences and enhance teaching, learning and knowledge.

Our Design and Technology curriculum promotes children's Spiritual, Moral, Social and Cultural development, ensuring that they are reflective and responsible citizens. Fundamental British Values are actively promoted in Design and Technology lessons in order to prepare the children for life in Modern Britain.

### **Impact**

Our well-planned Design and Technology curriculum ensures that children are knowledgeable and highly-skilled designers, who understand how to design and make 'high quality' products that solve real-life and relevant problems.

Through the breadth and depth that our curriculum offers, children become confident, independent and resilient creators, who are passionate and inspired by the subject, including having a love of cooking and nutrition.

### **Rationale**

Design and Technology prepares children to take part in the development of tomorrow's rapidly changing world. Creative thinking encourages children to make positive changes to their quality of life. The subject encourages children to become autonomous and creative problem solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas and eventually making products and systems. This is done through the study of aesthetic, social and environmental issues, as well as functions and industrial practices. This allows them to reflect on and evaluate present and past Design and Technology, its uses and its impacts. Design and Technology helps all children to become discriminating and informed consumers and potential innovators.

# <u>Design and Technology at St. Wilfrid's will enable children to:</u>

- develop imaginative thinking and to enable them to talk about what they like and dislike when designing and making;
- talk about how things work and to draw and model their ideas;
- select appropriate tools and techniques for making a product, whilst following safe procedures;
- use and explore a range of materials, resources and equipment;
- explore attitudes towards the made world and how we live and work within it;
- develop an understanding of technological processes, products and their manufacture, and their contribution to our society;
- foster enjoyment, satisfaction and purpose in designing and making
- use the internet to explore ideas and already made products;
- foster enjoyment, satisfaction and purpose in designing and making things;
- gain an understanding of food technology;
- understand and apply the principles of nutrition and learn how to cook

# Design Technology Subject Leadership

Subject Leaders are responsible for raising attainment and improving the standards of teaching and learning in their subject. They ensure that a carefully planned, broad and balanced curriculum is implemented for DT, champion the subject and demonstrate its importance to pupils and staff.

Subject Leaders demonstrate a good understanding of how DT progresses over time and how it connects with the school's curriculum as a whole. DT Leaders have high levels of subject pedagogical content knowledge for the age range that they are teaching, and an understanding of the critical endpoints that come before and after.

Subject Leaders at St. Wilfrid's Church of England Primary Academy, work alongside other schools within The Learning Together Trust. This provides opportunities to work collaboratively and creatively with colleagues across the key stages, thus moving the DT curriculum forward, and further developing the subject. Subject Leaders lead by example, setting high standards in their own teaching and ensuring that high-quality teaching and learning of DT takes place across the school, with the achievement and engagement of all pupils being their utmost priority.

# **Design Technology Subject Leaders will:**

- raise the profile of DT at St. Wilfrid's Primary Academy
- lead and manage the DT effectively and have an 'expert' knowledge of the xxxx curriculum overview, including all unit/topics across the whole school
- confidently articulate the DT curriculum design and have a clear and ambitious vision for DT (Intent, Implementation and Impact)
- monitor, evaluate and enhance the quality of teaching, learning and assessment in DT
- ensure that there is clear progression in knowledge, skills and vocabulary in DT, across school
- support, guide and motivate colleagues in their CPD, as well as build capacity across the school
- identify the subject's needs in the context of whole school priorities and produce a DT School Development Plan annually, reviewing this termly
- audit DT resources and identify resource needs and costings in DT School Development Plans, managing allocated budgets effectively.
- provide strategic direction and development of DT across the school.
- develop their own expertise through training and evidence-based research and investigate how implementations are embedding
- effectively communicate with the DT link Governor, sharing and celebrating DT
- review and update the DT Policy, as necessary

# **Design and Technology Curriculum**

Design and Technology is a foundation subject in the National Curriculum. Our school plans for the long and short-term using learning challenges for each unit of work that covers all relevant areas of the 2014 National Curriculum for Design and Technology.

We plan the activities in Design and Technology so that they build upon the prior learning of the children. We give children of all abilities the opportunity to develop their skills, knowledge and understanding. In addition, we also build planned progression into the scheme of work, so that the children are increasingly challenged as they move through the school.

### Early Years and Foundation Stage

We encourage the development of skills, knowledge and understanding that help Nursery and Reception children make sense of their world as an integral part of the school's work. As the Nursery and Reception class is part of the Foundation Stage of the National Curriculum, we relate the development of the children's knowledge and understanding of the world to the objectives set out in the Early Learning Goals. These underpin the curriculum planning for children aged three to five. This learning forms the foundations for later work in Design and Technology. These early experiences include asking questions about how things work, investigating and using a variety of construction kits, materials, tools and products, developing making skills and handling appropriate tools and construction material safely and with increasing control.

We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking and discussion. These activities, indoors and outdoors, attract the children's interest and curiosity. Throughout the Foundation Stage, activities and opportunities are planned where children can learn through talk, play and their own life experiences.

### **Cooking and Nutrition**

As part of their work with food, children will be taught how to cook and apply the principles of nutrition and healthy eating. Learning how to cook is a crucial life skill that enables children to feed themselves and others affordably and well, now and in later life.

### In Key Stage 1, children will be taught to:

- Use the basic principles of a healthy and varied diet to prepare dishes;
- Understand where food comes from.

### In Key Stage 2, children will be taught to:

- Understand and apply the principles of a healthy and varied diet;
- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques;
- Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

### Delivery of Design and Technology within our Curriculum

The school uses a variety of teaching and learning styles in Design and Technology lessons. The principal aim is to develop children's knowledge, skills and understanding in Design and Technology. Teachers ensure that the children apply their knowledge and understanding when developing ideas, planning, making products and then evaluating them. We do this through a mixture of whole-class teaching and individual/group activities. Within lessons, we give children the opportunity both to work on their own and to collaborate with others, listening to other children's ideas and treating those with respect. Children critically evaluate existing products, their own work and that of others. They have the opportunity to use a wide range of materials and resources, including ICT.

In all classes there are children of differing ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies:

- Setting common tasks that are open-ended and can have a variety of results;
- Providing a range of challenges through the provision of different resources;

### Design and Technology across the Curriculum

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. The children can apply scientific and mathematical knowledge to create products, using a variety of knowledge, understanding and skills gleaned from other National Curriculum subjects.

### Inclusion

At St. Wilfrid's Church of England Primary Academy, we teach DT to all children, whatever their ability and individual needs. DT forms part of our school curriculum policy, to provide a broad and balanced education to all children. We are very mindful of the learning needs of all of our children and those with Special Educational Needs are supported via effective planning, quality first teaching and assessment, differentiated activities as necessary, high expectations, suitable resources and recording

formats. We consider the targets set for individual children in their Individual Education Plans (IEPs) and Education Health and Care plans (EHCPs).

Through our DT teaching, we provide learning opportunities that enable all pupils to make good progress within each lesson.

We strive to meet the needs of pupils with special educational needs, those with disabilities, those with special gifts and talents, and those learning English as an additional language, and we take all reasonable steps to achieve this.

We believe that the curriculum should be accessible to all children. This is made possible through scaffolded support, small group work, use of Knowledge Organisers and word banks, or extra time to complete learning tasks.

Advice is sought from outside agencies as appropriate, to ensure an inclusive approach. If teaching staff require additional support to meet the needs of any child, they consult our SENDCo.

# **Equal Opportunities and Diversity**

All children at St. Wilfrid's Church of England Primary Academy, are offered a broad and balanced curriculum, differentiated to meet their needs as necessary. There is equality of access to the whole curriculum. No child is denied access to any part of the curriculum unless specific physical needs or religious/cultural considerations make it inappropriate.

At St. Wilfrid's, we are committed to providing all children with a curriculum that provides equality of opportunity and freedom from discrimination. Staff ensure that all children are treated fairly, equally and with respect. We do not discriminate against any child. All staff challenge any incidents of prejudice or racism. We record any serious incidents on CPOMS and draw them to the attention of the Executive Headteacher.

We plan DT lessons and activities to challenge and involve all pupils appropriately, according to age and capability, ethnic diversity, gender, culture, race, special educational needs or disability, and language background. Teachers use a range of strategies to ensure inclusion, and to maintain a positive ethos where children demonstrate positive and respectful attitudes towards others. Care is taken when selecting resources to ensure that a range of perspectives and viewpoints are represented, including those of men and women from different racial, national and religious groups. Careful consideration is taken to avoid stereo-typing, and bias, towards race, gender, role or disability. Through the teaching of DT, we aim to develop awareness of ethnic, cultural and economic diversity of human society and to foster positive attitudes to all people.

We deal with any issues clearly and sensitively, if they arise.

### Resources

Our school is building a wide range of resources to support the teaching of Design and Technology across the school. Classrooms have a range of basic resources with the more specialised equipment being kept in the STEM room, located in the Key Stage 2 building.

### **Assessment and Recording**

Teachers assess children's work in Design and Technology by making assessments as they observe them working during lessons. They record the progress that children make by assessing the children's work against the learning objectives for their lessons. At the end of each academic year, teachers make a judgement against the National Curriculum statements. Teachers then report their judgements on Target Tracker. In addition, this progress is reported as part of the children's annual report to parents. Additionally, class teachers keep photographic evidence of the children's work using I-pads. This records coverage of the subject area and examples of high-quality work, which can be found in their DT books.

# **Monitoring and Evaluation**

Monitoring and evaluation will be carried out by the:

- Senior Leadership Team
- Head of School Improvement
- Design Technology Subject Leaders
- Design Technology Governor
- Class teachers

All teachers are responsible for monitoring standards in their class. Design Technology Subject Leaders, under the direction of the Senior Leadership Team, take the lead in this. Monitoring will take place according to current school cycle. Using whole school priorities, identified by the Senior Leadership Team, subject leaders are responsible for producing a School Development Plan for Design Technology, to allow for progression and development of the subject.

Design Technology Subject Leaders will also monitor children's work books and long term and medium-term plans, to ensure that the Programmes of Study are being effectively taught and match the needs and abilities of the pupils. Subject leaders have curriculum release time and directed time, in which to fulfil their role.

Design Technology subject leaders are responsible for:

- monitoring the standard of work and the quality of teaching and learning in Design Technology and pupils' progress and standards
- supporting colleagues in the planning, teaching and assessment of Design Technology
  (through the use of 'book looks', pupil voice, lesson observations, discussion with teachers,
  subject audit, data analysis, and other monitoring activities that may be required), providing a
  strategic lead and direction for the subject in school
- monitoring and reviewing the implementation of policy and units of work
- ensuring there are rigorous assessment systems in place to enable teachers and pupils to monitor progress and attainment in Design Technology
- monitoring and analysing assessments, holding teachers to account
- liaising with the Executive Headteacher and Governors to feedback on the monitoring and impact of Design Technology across the school

# **Staff Support and Training**

St. Wilfrid's Church of England Primary Academy believes that all staff should be involved in a continuing process of improvement. Our school is committed to fostering a positive ethos of continuous learning. Continuing Professional Development (CPD) is the means by which a school is able to motivate and develop its staff community. CPD is intended to support teachers and to equip them with the skills and knowledge required to keep pace with the rapidly changing educational and professional environment.

This development takes place at a number of levels: individual, team, whole school and through wider networks. CPD supports and reflects the ethos, Christian Values and vision of the school.

The DT subject leader's role is to provide professional leadership and management for the subject to secure high-quality teaching, effective use of resources and improved standards of learning and achievement for all pupils.

### **Health and Safety**

The general teaching requirement for health and safety applies in this subject. We teach children how to follow proper procedures for food safety and hygiene. It is the responsibility of the class teacher to follow the relevant Health and Safety information. Teachers should ensure:

- Children must never use a tool until they have been taught how to use it.
- The children should always be encouraged to work in a safe and responsible manner.
- Teachers should always be aware of the essential dangers of practical work and ensure the safe use of tools and materials at all times.
- Possible hazards must be highlighted on planning.

### **Further Policies**

In conjunction with this policy, please also see:

- Science Policy
- PSHE Policy

Subject Leaders: Miss. A. Blackledge, Miss. F. Davies, Mrs. L. Rooney and Miss. E. Massey

Executive Headteacher: Mr. S. Colothan

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