

St Paul's CE (VC) First School Coven


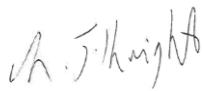
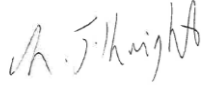


Design and Technology Policy

Reviewed March 2023



St Paul's First School, Coven
D & T Policy

Comments:	Written in February 2020 by H. McKenzie Review at least annually
Signed:	 A. Hyett, Chair of Governors, 06/05/2020
Reviewed:	 L. Knight, Chair of Governors, 22/3/2021
Reviewed:	 L. Knight, Chair of Governors, 14/3/2022

Introduction

This policy was reviewed by P.Hodgkins, the Design and Technology Subject Leader, in March 2023.

D&T in primary schools develops young children's skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food. D&T encourages children's creativity and encourages them to think about important issues.

DATA (The Design & Technology Association), www.data.org.uk

Intent

The development of Design and Technology proficiency at St. Paul's is achieved through opportunities and experiences across the curriculum. The curriculum enables pupils to take part in a broad range of practical activities directly concerned with:

- * identifying needs
- * generating ideas
- * planning and designing
- * making and testing
- * evaluating

Through creativity and innovation, design and technology continue to shape our lives. Using an activity-focused approach, a high-quality design and technology education should give pupils opportunities to create, innovate, design, make and evaluate a variety of well-crafted products. Pupils should be taught the technical skills and craftsmanship to execute practical tasks, thereby developing confidence in using these skills – National Curriculum 2014

Design and Technology is a way of learning, which spans and links the whole curriculum. In primary school it has its roots in imaginative play, art and science.

Specific Design and Technology research topics will be undertaken in accordance with St. Paul's's long-term curriculum plan. Teachers will also present children with additional Design and Technology opportunities in other areas of the curriculum.

Aims

We aim to help our children at St. Paul's develop:

1. Enjoyment and pride in their technological and creative abilities.
2. Understanding and knowledge related to the practical and aesthetic aspects of their experience of the world around them, including the influence of technological achievements of different cultures, past and present.

3. A keen interest in creating and developing functional and decorative design ideas.
4. Manipulative skills using a range of tools and materials.
5. A deeper understanding of the principles of nutrition and cooking skills.
6. Personal qualities of confidence, creativity, perseverance and self-evaluation.
7. The communication, co-operation and collaboration skills required to work as a member of a group.
8. An awareness of the needs and safety of others.

Implementation

Teaching and Learning of Design and Technology

Progression:

The **Foundation Stage** provides an important foundation for the development of design and technology 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.

The programmes of study for Design and Technology are set out for Key Stage 1 and Key Stage 2 in the National Curriculum. Class teachers are responsible for ensuring that all of the statutory content is covered within the school each year. The skills to be taught within each year group are based upon the Chris Quigley Essentials documents. The subject knowledge to be covered is planned using Cornerstones.

In **Key Stage 1**, children will carry out more structured activities based around a curriculum theme. They will explore and develop skills in designing, making and evaluating a product. For example: *healthy diet, moving toys, making fairy tale porridge, making carts with axels, scenery and props for the school play.*

Children will also develop their technical knowledge in areas such as:

- * designing a product for a specific purpose
- * generating and communicating ideas
- * cutting, shaping, joining, finishing (with support and independently)
- * selecting appropriate tools and materials for their chosen design
- * exploring and evaluating a range of existing products
- * using simple mechanisms in their products
- * testing and improving their product
- * evaluating their finished product against a given criteria
- * understanding where food comes from **
- * preparing food based upon a healthy and varied diet **

In **Key Stage 2**, children will build upon their knowledge and skills developed in Key Stage 1. They will base their design ideas and products on a specific KS2 curriculum topic.

For example: *making a healthy sandwich, Christmas stockings/calendars/cards, felt paper weights, Greek clay pots, nutrition and food provenance, lanterns, musical instruments (linked to science), making food (linked to English and history), Saxon print making, jewellery and felting, designing leaflets, bread making, making fairgrounds with moving mechanisms and electronic components.*

Children will also build upon and develop their technical knowledge in areas such as:

- * researching and developing ideas based on a specific design criteria and audience
- * generating and communicating ideas through sketches, diagrams, prototypes and ICT
- * selecting *appropriate* tools and materials from a wide range
- * cutting, shaping, joining and finishing *accurately*
- * investigating and analysing a range of existing products
- * improving and strengthening complex structures
- * using more complex mechanisms such as pulleys, gears, cams, levers, linkages and electrical systems
- * using computing programs to design, build, monitor and assess their product
- * evaluating their product using a design criteria and using peer assessment to review and improve their product
- * understanding how individuals and key events have shaped the world in relation to Design and Technology innovation
- * understanding the importance of a healthy and varied diet for health and well-being **
- * preparing and cooking savoury food using a range of techniques **
- * understanding seasonality and food provenance **

** **Cooking and Nutrition** has become a greater part of the Design and Technology curriculum in the recently revised National Curriculum of 2014. Pupils are expected to develop a variety of cooking skills, their nutritional knowledge and to foster a love of cooking as a crucial life skill.

Impact

Monitoring:

Throughout the school, children's design and technology capability will be developed within the framework outlined in the National Curriculum Programmes of Study 2014. Work is planned and delivered within each specific year group and tailored to meet the needs of that particular cohort. Progression is monitored and evaluated within the year groups and throughout the key stages by individual teachers and the Design and Technology Coordinator.

Recording and Assessment

Achievement, success and progression should be experienced by all children when learning and being taught Design and Technology. The staff need to be aware of the progress being made, difficulties being experienced, misconceptions addressed and expectations being met.

Children should be supported at each stage of the Design and Technology curriculum in areas of: designing, making, evaluating and developing technical knowledge.

Assessment can take the form of: monitoring children's discussions; question and answer with individuals or groups; peer assessment by children in pairs, groups and to the class; marking designs, idea development, finding evidence of creativity and problem-solving skills; and marking the aesthetic quality and functionality of the end product.

At the end of the academic year, the children will be assessed against the St. Paul's attainment framework, in accordance with the school's assessment policy:

- '1' – Working towards national expectations for age;
- '2' – In line with national age related expectations;
- '3' – Above national expectations for age.

Inclusion

All children should have the opportunity to work with a range of materials, tools and techniques, regardless of ability. Specific tasks should be differentiated, as and when necessary, to meet individual needs.

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

The Design and Technology teaching and learning at St. Paul's Primary School should reflect the fact that there are equally valid and appropriate solutions to problems which reflect the needs and beliefs of different cultures, past and present.

Special Educational Needs

The Design and Technology curriculum should fulfil the needs of all pupils. When planning work for children with special educational needs, due regard is given to the information and targets contained in the children's Individual Education Plans (IEPs). We have high expectations of all of our children, and ensure that learners have high expectations of themselves.

Racial Equality & Equal Opportunities

All children have equal access and inclusive rights to the curriculum regardless of their gender, race, disability or ability. We plan work that is differentiated for the performance of all groups and individuals. St. Paul's First School is committed to creating a positive climate that

will enable everyone to work free from racial intimidation and harassment and to achieve their full potential.

Health and Safety

Safety is of paramount importance in Design and Technology. It is the teacher's responsibility to be aware of safety issues in all Design and Technology 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

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 rigorous safety standards.

Risk Assessments for the use of tools and equipment are completed by the teacher and sit alongside the planning. All staff are briefed by the teacher on specific health and safety rules to be observed by staff and pupils.

Safety rules and safety issues should be taught to *all children* within each Design and Technology unit of work.

Cooking and Nutrition

When working with food:

- An adult will be required to supervise activities involving cooking and food handling/preparation.
- When working with food all children should follow personal hygiene guidance.
- Teachers should check the dietary needs of the children in their class to identify any foods that should not be available to specific children.
- Only the equipment which is for food use only, should be used.
- Ensure that all children use their own equipment when tasting food.

Leadership and Management

The Role of the Design and Technology Coordinator

The Design and Technology coordinator is responsible for:

- * reviewing and updating St. Paul's policies relating to Design and Technology
- * maintaining centrally stored tools and materials
- * monitoring standards of achievement and progression
- * updating the electronic portfolio of evidence
- * the coordination of assessment of Design and Technology
- * assisting and advising in the teaching of Design and Technology across the school

- * liaising with Design and Technology coordinators across SUAT
- * promoting and raising the profile of Design and Technology throughout the school.

Staff Training

The Design and Technology subject leader is responsible for ensuring that staff are adequately trained so that they are able to deliver the curriculum effectively. This will include: organising CPD; leading staff meetings; sharing resources for planning and teaching; supporting colleagues. Regular communication with staff will be sustained via email and all staff can speak to the subject leader if they require further support. The subject leader will attend regular SUAT updates and feedback key information and new priorities to staff.

All staff undertake Level 2 Food Hygiene training every 3 years.

Resources

It is the responsibility of the class teacher to be aware of the resources needed for a particular unit and to order any resources required within their year group budget. Some permanent resources are stored in school and are available from the store room, in agreement with the Design and Technology Coordinator. Other resources may be stored within individual's classrooms and shared throughout school when required.

Some Design and Technology resources are stored in the Art & Design storage room. Tools and materials for specific activities should be stored in labelled boxes.

Policy Written: 22/03/2021

Reviewed: 03/03/2023

Next Review: March 2024