**St Thomas CE (VC)**

**Primary School**



**Design and Technology Policy**

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Design and Technology

*Subject Policy*

***“Every child in an artist, the problem is how to remain an artist once we grow up”***

***Pablo Picasso***

**DT at St Thomas Primary**

At St Thomas we are committed to providing all children with learning opportunities to engage in a creative and engaging Design and Technology Curriculum. The purpose of Design and Technology is to give pupils the skills, concepts and knowledge necessary for them to express their responses to ideas and experiences in a visual or tactile form. It fires their imagination and is a fundamental means of personal expression. While it is essentially a practical subject, Design and Technology should provide opportunities for reflection and, with increasing sensitivity, pupils should acquire the ability to make informed, critical responses to their own work and that of others. There is great pleasure to be derived from Design and Technology and, through deeper understanding; pupils can gain access to cultural richness and diversity. The appreciation and enjoyment of the visual arts enriches all our lives. Design and Technology in primary schools develops children's skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food. It encourages children's creativity and encourages them to think about important issues.

***“The Arts is not just a subject to learn, but an activity that you can practise with your hands, your eyes, your whole personality.”***

***-Quentin Blake, Children’s Laureate***

**Intent:**

The school curriculum is informed by the national curriculum and is sensitive to pupil interest, as well as the context of the local area. It is a bespoke, broad and balanced curriculum which is used alongside the skill progression map for DT, to set out the knowledge and skills pupils will gain at each stage. Quality First Teaching of DT occurs at St Thomas Primary, as cohort groups plan effectively, ensuring clear subject milestones and learning objectives are made, previous knowledge and skills are built upon and opportunities for revision are made. The DT curriculum is designed around the needs of the pupils in our school and there are a variety of approaches used to enable pupils make good progress. Lessons planned have clear subject and skill intent, ensuring learning is meaningful and engaging where pupils gain knowledge and understanding of a range of skills, concepts, attitudes, techniques and methods of working creatively. The work given to pupils, over time and across the school, consistently matches the aims of the curriculum.

*The aims of teaching DT in our school are to develop pupils who:*

* *To enable all children to have access to a varied range of high quality DT experiences.*
* *To provide an imaginative, innovative and co-ordinated DT programme which will foster enthusiasm for design amongst all the children*
* *To foster an enjoyment and appreciation of the visual arts and a knowledge of artists, craftspeople and designers, through links with the local and wider multicultural community.*
* *To stimulate children’s creativity and imagination by providing visual, tactile and sensory experience.*
* *To help children explore the world at first hand, using all their senses and experimentation, and so gain knowledge and understanding of the world in which they live in.*
* *To develop children’s understanding of colour, form, texture, pattern and their ability to use materials and processes to communicate ideas, feelings and meanings.*
* *To inspire confidence, value and pleasure in DT.*
* *To cultivate children’s aesthetic awareness and enable them to make informed judgements about DT and become actively involved in shaping environments.*
* *To teach children to express their own ideas, feelings, thoughts and experiences.*
* *To develop children’s design capability.*
* *To enhance children’s ability to value the contribution made by artists, craft workers and designers and respond critically and imaginatively to ideas, images and objects.*
* *Ensure the progressive development of knowledge and skills (Practical, Theoretical and Discipline based knowledge).*
* *Develop the children’s competence in controlling materials and tools and becoming proficient in various techniques and processes.*
* *Begin to develop an awareness of the visual and tactile elements; foster enjoyment and appreciation of different mediums of DT.*
* *Increase critical awareness of the roles and purposes of DT in different times and cultures, and analyse works using the language of design and technology.*

All classes, in each year group will be given the opportunity to practice these skills with an aim to link to real life scenarios.

**Implementation:**

**At St Thomas primary,** **the design technology national curriculum outlines three main stages of the design process: design, make and evaluate. Each stage of the design process is underpinned by technical knowledge which encompasses the contextual, historical and technical understanding required for each strand. Cooking and nutrition has a separate section, with a focus on specific principles, skills and techniques in food, including where food comes from, diet and seasonality. DT is designed and delivered in a way that allows pupils to transfer key knowledge to the long-term memory which is then applied fluently.**

**Across each year group, DT is a coherently sequenced planned scheme of work that has a clear progression of skills and knowledge within five strands: Design, Make, Evaluate, Technical knowledge and Cooking and Nutrition. It is sequenced carefully so that new knowledge and skills build on what has been taught before and pupils can work towards clearly defined end points. At St Thomas, mastery of skill and knowledge is crucial; no gaps in learning should arise as pupils move onto the next stage**. Staff use the How to teach document which sets out how staff at St Thomas primary school should teach DT. This ensures consistency and sets clear expectations for all year groups. We set high expectations for our pupils and provide opportunities for all to achieve, including boys and girls, pupils with educational special needs, pupils with disabilities, pupils from all social and cultural backgrounds and those from diverse linguistic backgrounds. The class teacher’s role is a vital role to develop the progression in learning and understanding and create effective learning environments. They class teacher will motivate children as learners using a range of teaching approaches and techniques.

We teach pupils the act of investigating and making including exploring and developing ideas and work. We do this through a mixture of directed teaching and individual or group tasks. Teachers draw attention to good examples, they encourage children to evaluate their own ideas and methods and the work of others. Children are given the opportunity within lessons to work on their own and collaboratively on projects in two and three dimensions. **Pupil** **motivation and enjoyment is paramount so a variety of engaging and active approaches are encouraged.** **The Design and Technology curriculum intends to inspire pupils to develop a love of DT and see how it has shaped the world they live in.**

**DT in EYFS**

The EYFS framework is structured differently to the national curriculum as it is organised across seven areas of learning rather than subject areas. However, at St Thomas it is of primary importance that pupils develop skills early on so we have identified which early years outcomes are prerequisite skills for DT within the national curriculum.

**Early Years Foundation Stage During the EYFS pupils explore and use a variety of media and materials through a combination of child initiated and adult directed activities within the provision. They have the opportunities to learn to:**

**• Use different media and materials to express their own ideas**

**• Use what they have learnt about media and materials in original ways, thinking about form, function and purpose**

**• Make plans and construct with a purpose in mind using a variety of resources**

**• Develop skills to use simple tools and techniques appropriately, effectively and safely**

**• Select appropriate resources for a product and adapt their work where necessary**

**• Cook and prepare food adhering to good health and hygiene routines**

**Throughout the Early Years, the children are encouraged to explore and experiment with a range of tools and materials. Opportunities to investigate with different materials and tools are available both within the classroom along with the outdoor provision. By the end of Early Years, children are expected to be able to safely use and explore a variety of materials, tools and techniques, experiment with colour, design, texture, form and function. Share their creations and explain the process they have used.**

**“The creative area you can make presents, sometimes I make them for toys because soon it’s my baby dolls birthday” – Reception Child**

**Key Stage 1 (Years 1 and 2)**

**At Key Stage 1,** DT is about expanding children’s creativity and imagination through providing craft and design activities relating to the children’s own identity and experiences, to natural and manufactured objects and materials with which they are familiar, and the locality in which they live.

* Children will explore the visual, tactile and sensory qualities of materials and processes and begin to understand and use colour, shape and space, pattern and texture, to represent their own ideas and feelings.
* Children will focus on the work of artists, craftspeople and designers by asking and answering questions, such as: ‘What is it like?’ ‘What do I think about it?’

**“DT is when we learn about making different things. Technology is man-made things that help us to do stuff” – Year 1**

**Key Stage 2 (Years 3 to 6)**

At Key Stage 2, DT is about fostering children’s creativity and imagination by building on their knowledge, skills and understanding of materials, techniques, nutrition, design, evaluating and making processes, through providing more complex activities. Children’s experiences help them to understand the diverse roles and functions of DT in the world around them.

**Special Educational Needs Disability (SEND)**

At St Thomas Primary we strive to ensure that all children feel a sense of belonging and are given opportunities to rise to the challenge across the curriculum. We are committed to providing an ambitious Design and Technology curriculum that caters to the needs of all pupils, including those with SEND. Our Curriculum Leaders and teachers maintain high expectations for what SEND pupils can achieve, without diluting or unnecessarily reducing the curriculum. We understand the importance of carefully structuring the curriculum components into manageable "chunks" that can be tailored to individual needs. By sequencing these chunks coherently, we enable students to build upon their prior knowledge effectively.  
  
We recognize that overwhelming students with too much information at once can hinder learning and retention. Therefore, any adaptations to the DT curriculum for SEND pupils are based on their specific needs, focusing on key aspects of the curriculum objectives. These adaptations ensure that all learners have the opportunity to achieve the same objectives through tasks that align with their unique learning needs and styles.  
  
At St Thomas, we prioritize maintaining the integrity of the curriculum knowledge, as reducing it could pose challenges for later learning. By providing a supportive and inclusive environment, we aim to empower all students to reach their full potential in the DT curriculum. We recognise the diverse needs of our students and the importance of adaptive teaching to provide equitable access to the DT and Design curriculum. Our approach includes the use of Scaffolds, Scale, Structure and Style.

**Scaffolds**

* Scaffolding in Design and Technology involves providing temporary support to help students achieve learning goals.
* Use of step-by-step guides, visual prompts, and examples of completed work to illustrate techniques and processes.
* Demonstrating DT techniques and processes in real-time, allowing students to observe and replicate.
* Providing structured activities where students can practice new skills with teacher support before attempting them independently.
* Offering checklists for project steps and templates for design tasks to help students organize their work and ensure they follow necessary procedures.

**Scale**

* Scaling tasks involves adjusting the complexity and scope of activities to match students' varying abilities and developmental stages.
* Designing activities at different levels of difficulty to cater to diverse skill sets within the classroom.
* Breaking down larger projects into manageable segments with clear, achievable goals for each segment.
* Allowing students to work at their own pace, providing extensions for those who finish early and additional support for those who need more time.

**Structure**

* Effective lesson structure is essential for maintaining student engagement and ensuring clear progression through learning objectives.
* Setting clear, concise learning objectives for each lesson to guide student focus and effort.
* Organizing lessons in a logical sequence, building on previously acquired knowledge and skills.
* Establishing consistent routines for DT activities to provide a stable and predictable learning environment.
* Using ongoing assessments to monitor student progress and adjust instruction as needed to meet individual learning needs.

**Style**

* Varying teaching styles helps to address the diverse learning preferences and needs of students.
* Incorporating visual elements such as diagrams, videos, and illustrated examples to support visual learners.
* Providing hands-on activities that allow students to learn through doing, manipulating materials, and experimenting with different techniques.
* Using verbal instructions, discussions, and storytelling to engage auditory learners.
* Encouraging group projects and peer interactions to foster collaboration and the exchange of ideas.

By embracing adaptive teaching in Design and Technology, we aim to create a dynamic and inclusive learning environment where every student can thrive and express their creativity.

**Pupil Premium**

**To ensure effectiveness in DT, we use our four-strand strategy for Pupil Premium to ensure every eligible child is supported through:**

**· SUPPORT TO LEARN**

**· NURTURE TO LEARN**

**· ENGAGE TO LEARN**

**· EXTEND TO LEARN.**

**For further detail and information, please refer to the Pupil Premium policy.**

**Impact:**

**The Design and Technology (DT) curriculum is designed to foster a sense of enjoyment and confidence in students, enabling them to apply DT skills to other areas of the curriculum and in real-life situations. Through this curriculum, students will acquire deep, lasting knowledge, remembering more and understanding the key principles of Design and Technology. This understanding will be demonstrated through the practical application of skills and tools, both within school and in extracurricular activities.**

**The skills developed through the DT curriculum—such as efficient time management, teamwork, initiative, independence, resilience, and risk management—are intended to serve students beyond their school years, shaping them into well-rounded, capable individuals. These attributes will contribute to their future success and help them become proactive citizens who can positively impact society.**

**Pupil and Teacher Feedback**

**Pupil and teacher voices are integral to our assessment process. This ongoing feedback allows for continuous reflection and improvement of the DT curriculum, ensuring it meets the evolving needs of students.**

**Assessment, Intervention, and Data Collection**

**Ongoing Assessment and Record Keeping**

Teachers regularly assess student progress through a combination of observations, collected evidence, and end-of-unit assessments, which serve as key tools in evaluating learning outcomes. Informal assessments during lessons help teachers identify both high achievers (top 20%) and students requiring additional support (bottom 20%). Based on these assessments, tailored interventions are designed to extend learning for high achievers and provide targeted support for those who need it, ensuring every student receives appropriate guidance and opportunities for advancement.

**National Curriculum Objectives and Progress Monitoring**

**Teachers assess whether students are meeting National Curriculum objectives and fulfilling the school's curriculum guarantee. Assessment focuses on how well students embed concepts in their long-term memory and apply them fluently, emphasizing understanding over memorization. Students are deemed to be making expected or more-than-expected progress if they are advancing through the DT skills progression map at each stage of learning.**

**Assessment for Learning (AFL)**

**AFL practices help identify gaps in student knowledge and skills, informing the next steps in instruction. These practices include questioning, feedback, peer and self-assessment, end of unit assessments which encourage students to actively engage in their own learning. Pupils reflect on their current position, set goals, and consider how they will achieve them.**

**This comprehensive approach ensures that all students are assessed effectively, allowing for tailored interventions and a curriculum that fosters personal growth, critical thinking, and lifelong learning.**

**Leadership and Management**

The subject leader's role is to empower colleagues to teach DT to a high standard and support staff in the following ways:

* By keeping up to date on current issues and developments in primary DT; disseminating relevant information and providing training for staff members (either directly or through other professionals).
* Leading by example by modelling lessons or styles of teaching.
* Having knowledge of the quality of DT provision across the school and using this to provide a coaching and mentoring role.
* Identifying and acting on development needs of staff members. Staff supported to address gaps in their knowledge so that pupils are not disadvantaged by ineffective teaching.
* Monitoring expectations, provision and attainment across the school and providing feedback to develop practice further in order to raise standards.
* Taking a whole-school strategic approach to the spiritual, cultural and moral development of pupils, to make the world a better place.
* Ensuring the DT curriculum builds towards clear end-points e.g. what pupils are expected to know and do (skills) by each of these end-points e.g. by the end of a year, key stage or phase of schooling.
* Promoting DT by mentioning/highlighting good practice.
* Making sure the pupils know that DT is valued through display, celebration, themed days.

**Monitoring and Evaluation**

A range of monitoring techniques are used by the DT subject leader to ensure first quality teaching and learning of DT is taking place within school and these include; staff questionnaires, book scrutiny, planning scrutiny, planning drop ins, Seesaw scrutiny, talking with pupils (What helps them? What don’t they understand/enjoy?) and learning walks. The quality of teaching and learning is also monitored as part of the appraisal process. Assessment, Intervention, Data Collection and Analysis Assessment and Record Keeping Teachers regularly assess progress through observations and evidence. The children’s work in Design Technology is assessed by making informal judgements that are observed during lessons. This assessment process informs future learning and teachers identify children who are in the High Achievers 20% and ways their learning can be extended and the 20% Low Achievers in DT and ways in which they can be supported through interventions.

**Health & Safety**

**All staff are responsible for:**

* **Complying with the school’s Health and Safety Policy**
* **Taking reasonable care of their own health and safety and those of others affected by their acts or omissions. **
* **Co-operating with their management in complying with relevant statutory provisions. **
* **Using all work equipment and substances in accordance with the instruction and training received, especially when preparing food (using sharp knives). **
* **Not intentionally misusing anything provided in the interests of health, safety and welfare. **
* **Following all prescribed safe working practices, and not working while unfit to do so. **
* **Reporting to their co-ordinator or Headteacher any health and safety problem they cannot deal with themselves, or any shortcoming they find in the health, safety and welfare arrangements. **
* **Ensuring behaviour is appropriate when cooking/baking. **
* **Ensuring children know how to use appliances safely.**

**All children will be responsible for: **

* **Complying with school rules and procedures **
* **Taking reasonable care of themselves and others. **
* **Co-operating with their teachers and other school staff. **
* **Using equipment and substances in the manner in which they are instructed. **
* **Not misusing anything provided for the purposes of health and safety.**
* **Teachers will teach the safe use of tools and equipment in accordance with health and safety requirements.**
* **They will be responsible for storage of tools and materials.**
* **Children will be taught to recognise hazards in a range of products, activities and environments and take action to control the risks to themselves and others.**
* **Teachers are ultimately responsible for safety within their classroom.**

**Teachers will teach the safe use of tools and equipment in accordance with health and safety requirements. They will be responsible for storage of tools and materials. Children will be taught to recognise hazards in a range of products, activities and environments and take action to control the risks to themselves and others. Teachers are ultimately responsible for safety within their classroom.**

**Food Hygiene and Safety**

**Food will be bought and used on the day it is needed. Staff will ensure that all surfaces, cooker etc are clean. Aprons will be worn by everyone working with food and hands washed before. A contribution towards costs may be requested. Letters will be sent home to ascertain possible food intolerances/allergies prior to lessons. It is the responsibility of the teacher to ensure the baking room/DT resources room are returned to a high standard of cleanliness and safety.**

**Partnerships with Parents**

Parents are kept informed of topics that are being covered through the beginning and end of term letters and homework on Seesaw which is provided on a fortnightly basis. In addition, at the end of each academic year, parents receive their child’s yearly report which clearly indicates pupil effort and attainment in this area of the curriculum. Parents also have access to the DT curriculum policy on the school website, where they will also find a page specifically for DT which contains information about the DT topics covered, celebrated work and links to suitable informative/learning web pages.