

Design and Technology Policy

|  |  |  |  |
| --- | --- | --- | --- |
| Key Document details: | | | |
| Author: | **Sana Ramzan** | Approver: | **Bryony Bardwell** |
| Owner: | **Sana Ramzan** | Version No.: | **1** |
| Date: | **September 2024** | Next review date: | **September 2026** |
| Ratified: | **September 2024** |  |  |



**Design and Technology Policy**

Design and Technology prepares children to take part in the development of our rapidly changing world. 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

At Drove Primary School we give children “the roots to grow and the wings to fly” through a

carefully designed curriculum which is underpinned by 4 Golden Threads.

Diagram

Description automatically generated

We have carefully chosen our Golden Threads because they are unique to our school context and setting.

**Community:**

Students are introduced to fundamental design and technology (D&T) concepts and competencies encompassing drawing, basic woodworking, elementary coding, and crafting. As students progressively acquire these foundational proficiencies, they gain confidence to make meaningful contributions to the community through hands-on projects. D&T initiatives frequently integrate sustainability principles, instilling eco-conscious practices in students. Students source recycled materials from their homes for some of these projects, which fosters a deeper connection between their home and school environments. This leads to improved involvement of parents and community members in school activities and projects. We believe that Design and technology education in primary school plays a pivotal role in preparing students for future careers, particularly as they progress into secondary and post-compulsory education.

**Experiences:**

Our primary objective is to provide our students with immersive hands-on experiences that ignite feelings of joy, curiosity, and wonder in their lives. We are dedicated to equipping them with foundational design skills and techniques, empowering them to express themselves creatively and tackle real-world challenges with confidence.

Furthermore, we actively promote a culture of self-assessment and improvement among our students. Through the " explore, design, make, and evaluate" cycle, we encourage them to critically analyse their own work. This process not only enhances their craftsmanship but also cultivates a mindset of continuous growth and innovation.

Ultimately, our goal is to inspire a lifelong passion for design and technology, enabling our students to leverage their skills and creativity to make meaningful contributions to both their educational journey and the broader world around them.

**Language:**

Design and technology lessons introduce students to specialised vocabulary related to materials, tools, and processes. Teachers incorporate vocabulary in the lessons and model the use of technical terms correctly, thus expanding the pupils’ language skills. The “explore, design, make and evaluate” approach reinforces their technical skills and enhances their ability to communicate ideas, processes, and outcomes effectively in a variety of ways. Peer review processes, where students assess and provide feedback on each other's projects, encourage constructive communication and the development of language skills. Success in hands-on design and technology projects boost students' confidence, regardless of their language proficiency.

**Knowledge and skills:**

We emphasise the importance of a solid design and technology foundation, which entails understanding the explore, design, create and evaluate cycle. Proficiency in D&T tools and processes ensures that students can produce high-quality, safe, and functional designs and projects. This allows pupils to explore new ideas and innovate, preparing them for future challenges and opportunities. The knowledge organisers (KO’s) are designed, taking the skills and knowledge from our DT progression document. The KO’s contain the key vocabulary with their definition, the focused designers and the pupils’ previous learning. The pupils are encouraged to refer to the KO’s to review, revise and check their understanding about the unit.

**Teaching and Learning of Design and Technology**

**EYFS**

The Early Years provide 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. We encourage the development of skills, knowledge and understanding that help nursery and reception children make sense of their world.

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. The staff and teachers ensure that children are exposed to the correct vocabulary from an early age, modelling and encouraging the correct use of key terminology.

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.

**KS1 and KS2**

D&T is a foundation subject in the National Curriculum. Our school uses the National Curriculum objectives as the basis for planning in design and technology. The national curriculum for design and technology 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.
* D&T is taught in a cross-curricular way making specific links across different subjects, which include but not limited to:
* English – D&T provides valuable opportunities to reinforce what the children have been doing during their English lessons aiding discussion of their language-rich texts.
* PSHE and School Values – D&T encourages the children to develop a sense of responsibility in following safe procedures when making things. They also learn about health and healthy diets. Their work encourages them to be responsible and to set targets to meet deadlines, and they also learn through their understanding of personal hygiene, how to prevent disease from spreading when working with food.
* Computing - Children use software to enhance their skills in designing and making, and use draw-and-paint programs to model ideas and make repeating patterns. They use technology to research ideas to provide a range of information sources. The children also use ICT to collect information and to present their designs through draw-and-paint programs where applicable.
* Science – D&T provides an opportunity for children to give more thought to the environment and the impact the human race has. Through different topics children are able to realise what future creations might be possible.
* Our progression skills and whole school overview documents maps out the objectives covered in each term during the key stage linking to the termly Knowledge Organisers, which give details of each unit of work for each term. They identify learning objectives and outcomes for each topic and ensure an appropriate balance shared between D&T and Art across the year.
* 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 and we also build planned progression into the scheme of work, so that the children are increasingly challenged as they move through the school.
* The class teacher keeps these individual plans, and the class teacher and subject leader can discuss them on an informal basis allowing for topics to be adapted to fit our cross-curricular needs. Planning in D&T follows a explore, design, make and evaluate process.
* In KS2, food technology is delivered every term as part of the PPA cover and the teacher follows the progression map/ KO’s.

**Supporting Children with SEND/ Inclusion**

* All children, whatever their ability, at Drove get to experience D&T as part of our broad and balanced curriculum.
* We provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child’s different needs.
* For SEN children, we make D&T accessible by looking at the suitability of classroom organisation, teaching materials, teaching style, differentiation for example:
* Setting common tasks that are open-ended and can have a variety of results
* Using appropriate challenge to build skills/knowledge in small manageable steps
* Using additional adults to support the work of individual children or small groups
* Use of addition resources to aid with coping in a full class environment ie. ear defenders

**Health and Safety**

* The general teaching requirement for health and safety applies in this subject.
* Pupils should be encouraged to:
* Collect and return tools and equipment safely
* Only move around the classroom when necessary
* Wear safety equipment whenever necessary
* Direct safety instructions will be given to children each time they undertake a design and technology activity.
* We teach children how to follow proper procedures for food safety and hygiene.
* All year groups who are using sharp tools need to have a Risk Assessment in place and signed by the Headteacher before the lesson is to take place.

**Assessment - Key Stage 1 and 2**

Our assessment methodology is based on continuous observation throughout lessons. Teachers and staff maintain an open channel of communication by exchanging relevant information about each student's performance, fostering a comprehensive understanding of their progress. Commencing in Year 1 and extending through Year 6, all students are required to maintain design and technology (DT) books, serving as a source to showcase the progression of their knowledge and skills. Knowledge Organiser is presented at the commencement of each project, providing a foundational framework. Furthermore, the conclusion of each lesson entails a plenary session where students engage in reflective tasks on their learning ladders, capturing their insights as a manifestation of Pupil Voice. In upper Key Stage 2, pupils actively participate in peer feedback and evaluation processes, enriching their collaborative learning experience. In addition to this, Year 5/6 pupils are provided with an opportunity to give their feedback regarding their DT (Design and Technology) units online, using Microsoft Forms. This allows the DT subject lead to gather valuable insights into the students' experiences, preferences, and suggestions for improvement. By collecting this feedback, we can make informed decisions to enhance the DT curriculum and ensure it aligns with the needs and interests of our students, ultimately fostering a more engaging and effective learning environment.

**Resource Availability**

 Inside the DT cupboard, every year group has a dedicated drawer for the units they teach in DT. Any additional/ shared resources are labelled and placed on the shelves. The DT subject leader checks the stock every term and places orders according to the school policy. For any sharps equipment and food technology units, the teachers must refer to the risk assessment to ensure the pupils’ and staff safety.

**Review of the Policy**

At the end of each academic year, this policy will be discussed and if necessary revised in the light of any changes made locally and nationally.