



Farnborough Road Infant School

Design and Technology Policy

'Learning, Caring and Achieving Together'

Vision

At Farnborough Road Infant School we are Design and Technology Enthusiasts! We want all our children to love Design and Technology and have no limits to what their ambitions are. We want them to aspire to be a variety of professions such as; architects, engineers, graphic designers, chefs, nutritionists or carpenters (to name a few!).

We want all children to have access to appropriate Design and Technology experiences and resources so that they can become the professions of the future! We want all children to enjoy STEM learning to encourage technical vocabulary, and feel confident when using design and technology methods and processes throughout their education. We would like all pupils to understand how valuable these roles are in providing products and solutions in the world around us, solving real and relevant problems by thinking about theirs and others, needs, wants and values.

Intent

Our Design and Technology curriculum promotes curiosity, creativity and imagination, and empowers our children to become independent and resilient learners. The FRIS Design and Technology curriculum not only meets National Curriculum requirements, but will provide memorable Design and Technology lessons that will develop their Design and Technology capital and prepare them for the next stage in their education.

Children experience a wide variety of Design and Technology opportunities in well planned inspiring and practical lessons, and during our annual Science and Technology Week. We strive for all children to have the confidence to take risks and to be resourceful and innovative so they can have a real impact on daily life and the wider world. Additionally, we have specialist visitors to school throughout the year to enhance our curriculum. We offer lunchtime and after school clubs that focus on developing key skills in Design and Technology.

Implementation

The Design and Technology curriculum has carefully planned learning opportunities which ensure in each year group there is a progression of skills, understanding and knowledge, relating all products to a particular user and real-world links to ensure authenticity. At Farnborough Road Infant School, we focus on 6 important principles of Design and Technology.

- The User – Who are we making it for?
- The Purpose – Why are we making it?
- Authenticity – Is our product believable, meaningful and real?
- Functionality – Does it work and function effectively?
- Innovation – Can we create a product that is innovative and different?
- Design decisions – Can we design our product and decide how it will work?

From entry into school the children are given a rich diet of technological experiences. Our Nursery children are engineers and architects as they explore construction materials and make junk models, practising different joining techniques. Our children prepare healthy food, learning correct food preparation skills and hygiene, as farm (Nursery garden) to fork is a feature of the food technology curriculum in our school. School grown carrots are used to make carrot cake, pumpkins have been transformed into silky soups, apples make their way into fruit kebabs and Gruffalo crumble. Textile lessons are built upon from weaving skills in EYFS, to Year 1 learning how to design and create their own superhero capes repurposing old t-shirts, and Year 2 designing and making their own unique Christmas stockings to hang on their fireplace ready for Father Christmas to fill. Finally, all children explore the use of

structures- figuring out how to make them stronger and more stable. KS1 create a vehicle to transport an alien into space, as well as a vehicle to transport a small figure across the classroom (exploring and using mechanisms such as wheels and axles)! Not only that, all children will then test their finished product to assess its' functionality, and then self-evaluate their own work along with their peers, learning how to provide constructive feedback.

Organisation and Planning

EYFS

Throughout Caterpillars, Nursery and Reception the children are shown how to use simple tools safely and appropriately (hole punchers, scissors, tape dispensers etc). Children are given time to explore a variety of media and learn and explore how to join materials effectively. The children are encouraged to develop and explore their skills through the continuous provision provided within the setting as well as during adult led activities.

Key Stage 1

At Farnborough Road Infant School, we use the Nation Curriculum (2016) for the basis of our Design and Technology planning. Our planning has been written adapted to suit our school and our own knowledge of our local area.

- The Programme of Study identifies what opportunities will be provided to children in order to develop their Design and Technology skills. It highlights what assessment opportunities there will be throughout each child's learning journey.
- To ensure coverage of the programmes of study (POS) for KS1, an overall planning sheet for KS1 is amended by the Design and Technology leader as units are taught.
- Each unit of work is taught in specific Design and Technology lessons weekly, each half term.
- The unit is split into a sequence of learning, which details the range of activities taught including all aspects of the design process- designing, making and evaluating.
- Each unit is evaluated and shared during Year Group meetings. Teachers use Arbor and assessment sheets to assess children's understanding. This information is collated by the Design and Technology leader.

Children will have opportunities to develop key skills and knowledge for design and technology, which will be studied more fully at Key Stages 2 and 3 and at GCSE level. This will provide connections for their long-term memory.

The taught Design and Technology lessons are overseen by the subject leader, and these will be evaluated in year group meetings. Feedback from these evaluations will inform future planning and ordering of resources.

Progression of Skills

Progression lies in the acquisition of new concepts and the deepening understanding of those already encountered. These include:

- An increase in knowledge, skills and understanding.
- Moving from familiar to unfamiliar contexts.
- Tackling problems, which demand more complex or difficult solutions.

The rate of progression will, of course, vary from child to child and has to be considered when planning the teaching and learning situations.

Vocabulary, Oracy & Knowledge Organisers

At Farnborough Road Infant School, emphasis is placed on developing the vocabulary and oracy skills of our children. At least one Design and Technology session per unit of learning is dedicated to an oracy-based activity - such as a debate, discussion or reasoning task.

At Farnborough Road Infant School, we believe that there should be no ceiling on the technical geographical vocabulary that our learners are exposed to. With this in mind, Design and Technology 'dartboards' with three levels of challenge are prominent in all classrooms in Key Stage One. Teachers will refer to this language when teaching themes and topics.

Equal opportunities

At Farnborough Road Infant School we respect difference, value diversity and embrace equality and fairness for all. Our school values and inclusive curriculum ensures that all pupils reach their full potential. All children should have the opportunity to reach their full potential in Design and Technology and be included in all activities, regardless of gender, race, disability, religion. Resources should be chosen to reflect the equal roles of men and women, and the fact that we live in a multicultural society. Our Equality and Diversity Lead also liaises with all subject leaders to ensure our school curriculum reflects the protected characteristics as outlined in the Equality Act 2010.

Children with SEND

Children with additional needs are included in whole class lessons and teachers provide scaffolding and relevant support as necessary. A toolkit has been provided to all class teachers, highlighting appropriate ways in which children with specific SEND can access the Design and Technology curriculum. Evidence for SEND pupils can be gathered in a range of different ways, including more oral based tasks.

Resources and Visits

The Design and Technology leader keeps the staff informed of new developments and new resources via INSET days and attendance at Year Group Meetings. The Design and Technology leader ensures equipment and resources are tidy and in good working order. The leader is responsible for replenishing stock as necessary – within budget.

Most Design and Technology resources are stored centrally. Potentially dangerous tools, adult use only – e.g. the glue guns are located in the art cupboard (staff access only). All adults must be aware of the potential dangers of these tools and always use them safely, for more details, consult the Health & Safety policy.

Every classroom is equipped with basic Design and Technology equipment – cello tape dispenser, dispenser for masking tape, scissors, string, paper clips, wool, glue, glue spreaders, stapler for children, hole punching, card, paper of various sizes and quality, shape templates, felt-tip pens and paint.

Food technology resources are located in the kitchen. Food technology lessons can take place in the kitchen. Children do not have access to this area unless accompanied by an adult.

Assessment, Reporting and Recording

Assessment is built into all stages of the planning process. Teacher assessments will be undertaken in a variety of ways and contexts (see Assessment Policy for more detail of the variety of procedures).

Teachers will observe, listen, and question children as they work. Teachers will be assessing and evaluating the processes of how children work and the products they make. Self and peer evaluation are an integral part of this process. 'Circle time' is a useful forum for this kind of activity, in which teachers play a vital role, working sensitively with children to help them evaluate their work, and the work of others, including commercially made products. Children in Key Stage 1 will learn to write written evaluations for their peers.

Teacher assessments will be monitored during Year Group moderation. Children's assessments are used to inform planning and enable the teacher to formulate appropriate strategies for children e.g. consolidation of a technique.

Progress is recorded in teacher's own records and where relevant, evidence is retained – written, pictorial, photographic, the actual product. The DT leader has a clear role and overall responsibility for the progress of all children in DT throughout the school.

Parents can also monitor children's achievement through displays and twice-yearly parents' evenings.

Impact

At Farnborough Road Infant School, we value a high-quality design and technology education. We believe that this will give children a strong foundation of key skills and knowledge in design and technology. This will enable them to develop the confidence and creativity to become the designers of products in our technological world.

Our design and technology lesson encourage children to explore and discover solutions and develop skills through practical, hands-on experience, where they evaluate and improve models, products and designs.

We strive for every child to achieve their full potential in design and technology and develop a creative approach to making products and providing solutions in real-world situations. We want them to be ready for their next stage in learning and inspire aspirations for future career paths.

At Farnborough Road Infant School, we are **the future designers and solution finders!**

Review

This policy will be reviewed regularly

Updated December 2022

Signed _____ Date _____ Headteacher.

Signed _____ Date _____ Chair of Governors.