Our school nurtures curiosity and creativity through an inspiring, broad and engaging curriculum, where learning is at the heart of all that we do. Children at Reedley learn to become resilient and self-assured in a safe environment where challenge is key. Team Reedley are encouraged to thrive and achieve as individuals, preparing them for their role as caring and active citizens in modern Britain.

Reedley Primary School Curricular Policy for Design and Technology

Contents

How Pupils Learn Design and Technology

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of design and making. Pupils will learn the about the six principles of Design and Technology when designing and making: user; purpose; functionality; design decisions; innovations and authenticity. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens.

Key Stage 1 and Key Stage 2:

In line with the National Curriculum at Reedley we aim to ensure pupils have opportunities to:

- Understand how key events and individuals in design and technology have helped shape the world and the impact these have had.
- Learn to think creatively to solve problems.
- Build and apply a repertoire of knowledge, understanding and skills in order to design and make high quality products which consider their own and others' needs.
- Select appropriate tools and techniques with increasing accuracy for making a product, whilst following safe procedures.
- Critique, evaluate and test their ideas and products and the work of others, following the iterative process.
- Apply the principles of nutrition and learn how to cook.

EYFS:

Design and Technology in the Early Years Foundation Stage framework comes under the heading of Expressive Arts & Design. We provide opportunities for pupils to:

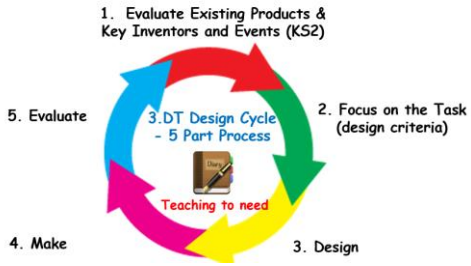
- Develop a curiosity and interest in the through investigating, talking and asking questions about familiar products.
- Develop confidence and enthusiasm through exploration.
- Develop construction skills to build and construct objects, and provide activities for exploring joining, assembling and shaping materials to make products
- Share their creations, explaining the process they have used.
- Develops fine and gross motor skills.
- Embeds the characteristics of effective learning.

Planning the Design and Technology Curriculum

To ensure high standards of teaching and learning in Design and Technology, Reedley have implemented a curriculum that is progressive throughout the whole school.

- To begin, Teachers refer to the 'Design and Technology Curriculum Map'. Our curriculum ensures all the strands of learning are taught (food technology, structures, textiles, mechanisms, electrical systems and computer aided design). This gives teachers an overview of the progression of skills of their project as well as the keys events or innovators which pupils will learn about.
- Teachers then reference the 'Design and Technology Knowledge, Skills and Concept Map' document. Within this document the skills, knowledge, concepts and key vocabulary are expanded upon.
- Before the start of the topic teachers assess prior knowledge or skills through assessment and practising the skills needed e.g., threading a needle for sewing.
- There is a whole school expectation that EAL learning will be pre-taught key vocabulary.
- From these Teachers may decide to base a Design and Technology key question on their 'Teaching Backwards' document and may choose to place subject specific concepts and vocabulary on the 'Knowledge Organisers'.
- The design cycle follows an iterative process of design and making. This is referred to throughout the teaching process with the pupils. The six principles of design are also discussed throughout. The design cycle is shown below:

Whole school approach of the planning and delivery of the 'DT Design Cycle'



Examples of how to record each stage of the cycle follows:

1. Existing Products & (for KS2) Key Innovators and Events: photos or diagrams of mechanisms, writing information on products available already (to collect information about style, decoration and size), collecting pictures or samples of products or materials, have records of interviews or results of a survey.
2. Focus on the Task: pupils will refer to the six principles when making considerations when designing – user, purpose, functionality, design decisions, innovation, and authenticity.
3. Design: The design should include information about the materials chosen, the process to be used, the equipment required and how the product will be finished. Pupils in KS2 will include a cross-sectional or an exploded diagram when designing. Pupils then must make a mock-up/prototype. After reflecting on these pupils will then edit their original design to reflect areas of improvement.
4. Make: Half-way through the making process pupils record successes/ amendments to their edited design. In addition, Teachers will keep a record of pupil's final projects through sticking photographs in Theme books, on the website, on a display or on Target Tracker.
5. Evaluate: Pupils evaluate the final product against their design and consider in the product is innovative, functional, appealing and fit for purpose. Pupils in KS2 will also peer evaluate each other's products.

Teaching Styles, Classroom Organisation and Time Allocation

The teaching styles used will ensure active learning by including the children in discussions, investigations and problem-solving activities. Teachers ensure that the pupils apply their knowledge and understanding when developing ideas, planning and making products and then evaluating them. Pupils critically evaluate existing products, their own work and that of others, identifying strengths and areas for development in a positive way. They have the opportunity to use a wide range of materials and resources, including ICT. At the end of each session children will have the opportunity to reflect on and record what they have learnt in their Theme books.

We organise the learning 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 these with respect. A Design and Technology project will be blocked for example, a week of afternoon sessions or throughout two school days.

Resources

Our school has shared resources to support the teaching of Design and Technology across the school. This specialised equipment is kept in the Design and Technology storage units within our workroom, in the kitchen area in the porta cabin and in the school office. Teachers will be responsible for the ordering and management of the resources and equipment for their class projects. The subject leader will order resources if there is a shared whole school project.

Health and Safety

The general teaching requirement for health and safety applies in this subject and staff should refer to the health and safety policy. For use of equipment that is not covered by the health and safety staff should use the CLEAPSS guidance on how to use equipment in the classroom. We teach children how to follow proper procedures for food safety and hygiene.
To ensure the safe use of tools and equipment, it is important that teachers are confident when using them, so that they can correctly demonstrate their use. All pupils should be clear on the intended use of the tools. An annual inspection of resources/equipment will be made by the subject leader to ensure the safety of the tools.

It is the responsibility of teachers to teach the safe use of tools and equipment and insist on good practice. Pupils will be taught to collect and return tools and equipment safely; follow clear instructions; only move around the room when necessary; and wear safety equipment whenever necessary.

Knives used in cooking are kept in the school office in a locked cupboard and children in KS1 and KS2 may use these under direct supervision. Low temperature glue guns may be used by children in Years 1 to 6, as long as this is limited to small groups and is under direct adult supervision. Hot glue guns are to be used by teaching staff/adults only. The teacher will be responsible for the health and safety of themselves, classroom assistants and pupils within their class.

Equal Opportunities

At Reedley we teach Design and Technology to all pupils regardless of their needs and consider the targets set out for children in their Individual Education Plans. Teachers make provisions which enable all pupils to make progress through setting suitable learning challenges, responding to the diverse needs of pupils and overcoming potential barriers to learning. Teachers then assess against the National Curriculum allowing us to consider each child's attainment and progress against expected levels.

Developing Spiritual, Moral, Social and Cultural Education within Design and Technology

The teaching of Design and Technology offers opportunities to support the social development of our children through the way we expect them to work with each other in lessons.

Our groupings allow children to work together and give them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and co-operative work across a range of activities and experiences in design and technology, the children develop respect for the abilities of other children and a better understanding of themselves. They also develop a respect for the environment, for their own health and safety and for that of others. They develop their cultural awareness and understanding, and they learn to appreciate the value of differences and similarities.

A variety of experiences teaches them to appreciate that all people are equally important, and that the needs of individuals are not the same as the needs of groups.

Assessment and Record Keeping

Teachers in each year group are required to assess attainment at the end of each term for each child. There are five areas in which a child will be assessed: design, technical knowledge, make, evaluate and cooking. Within each area there are statements of achievement and understanding. From these, teachers should judge a level of attainment for a child of either 'Below, Just Below, Expected or Above'.

Monitoring Arrangements

Monitoring will take place termly and will consist of book looks, learning walks, pupil interviews and discussions around planning with staff. After monitoring, feedback will be given to individual staff/year groups.

Reviewed: July 2024
Next review: July 2025