

Treeton CE(A) Primary School
Design and Technology Policy
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'This policy reflects the new statutory guidance issued through the National Curriculum (2014). All policies have been written to ensure that these points of study are covered in this policy, and expanded on where necessary to develop the school's own, individual curriculum. This curriculum is based heavily on thoughtful first hand experiences, creative endeavours with these experiences and an inherent connection to the children of Treeton school, their needs and backgrounds. Additionally, it has been designed and patterned to ensure that children maximise their progress in school and are given the opportunities to widen their learning and aim for even higher levels of study. It has been carefully designed to meet the needs of the school's values, vision and ethos with the new curriculum in mind.'

1. Definitions

Design and Technology is a way of learning. It can be defined as follows:-

Design and Technology is the purposeful use of inventive thinking and creative activity leading to the production of an object, system or an environment which best satisfies a perceived need.

Design and Technology (D.T) is part of everyone's daily life. It is found in many forms: clothes, hospital equipment, skin creams, cereals, chocolates, cars, aeroplanes... products which have been designed to help people with their needs. Design and Technology is part of every child's experience. It is important that children are not only aware of what Design and Technology is, but also develop a practical capability on it.

D.T combines the skills, knowledge, concepts and values used by people to tackle problems of living in our man-made world. Children can see the sense of solving problems; learning is relevant. D.T, as a way of teaching and learning, has much in common with how primary school teachers teach. At the root of good primary practice is the development of important skills, concepts and attitudes through experience. The D.T process involves analysis, problem solving, practical capability and evaluative skills that are all transferable. In primary schools D.T fits naturally into an integrated curriculum and is an approach to learning which is already familiar.

Design and Technology (D.T) is a practical curriculum area that involves the child in meaningful activities which allow children to design and to make. Children should develop skills and knowledge of a wide range of materials and equipment through practical activities in a safe and controlled environment.

2. Why We Teach Design and Technology

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

3. Aims

Through DT we aim to:

- 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 ideas and products and the work of others
- Understand and apply the principles of nutrition and learn how to cook.
- Develop enjoyment and confidence

- Develop children's awareness of a design process through which they can communicate their ideas in a practical context
- Build an awareness of health and safety issues

We aim to **encourage** children to:

- Develop confidence and satisfaction in identifying, considering and solving practical problems
- Produce quality outcomes using a variety of materials, methods and approaches, which have been evaluated and tested at every stage of their development
- Develop perseverance and a flexible approach
- Plan effective ways of proceeding; organise resources; and use tools and equipment safely
- Assess the aesthetic, practical, social and technological quality of their own work and that created by others
- Identify and use knowledge and skills from other areas of the curriculum, particularly art, science, English and mathematics
- Express themselves creatively and imaginatively
- Effectively communicate ideas and opinions
- Use ICT to support the designing and making processes.
- **We aim to ensure that the child's work is independent, supported primarily through modelling so that their work is unique, personal to them and completely their own. It is imperative that adults within school must not contribute to a child's work.**

4. Curriculum

At Treeton C of E (A) Primary we follow two year rolling programmes of topics for each Key Stage (Foundation Stage, Key Stage 1, Lower Key Stage 2, and Upper Key Stage 2). This two year cycle has been developed to incorporate a range of skills and knowledge and it can be used effectively with mixed age classes. The topics are planned to ensure a balance of materials, skills, knowledge and understanding are taught progressively each year.

We teach DT through the focused tasks and projects, and plan using a cross-curricular approach with Art and with links with other subjects. Activities are a balance of designing and making products; focused practical tasks to develop and practise specific skills; and knowledge and investigating, disassembling and evaluating simple products. D.T can be made relevant by using interesting contexts for children's activities and by ensuring that the purposes of the project is meaningful and based on real life needs and uses.

5. Planning & Coverage

We use the D&T Association to inform planning. We use knowledge organisers to document each stage of the Design, Make and Evaluate and these are put into sketchbooks for children to use as a learning prompt

Our approach to planning the curriculum is a cross curricular experiential approach through termly topics.. The starting point is usually based around a visit or first hand experience that can support the study of several curriculum areas, and, taken into account, is the child's level of development at that given time. DT work is planned taking into consideration the skills that need developing; the tools and processes to be used; the opportunity for experimentation and the breadth balance and depth the teacher feels is required.

Planning should allow for children to complete an individual piece of work -not to work collaboratively (more than 1 person contributing to a piece of DT work). Children can work together to develop ideas but their finished outcome should be an individual piece. However, a piece of DT work can be done collaboratively if the reason behind it relates to working as part of a team or creating something for the school community (e.g. Enterprise projects). Work that is completed collaboratively should be kept in school and not sent home with children at the end of the year.

6. Risk assessments

As DT often requires specialist equipment including tools it is crucial that correct risk assessments are followed. Teachers will create a specific risk assessment for each activity if the generic risk assessment is not detailed enough for the activity.

7. Assessment

Sketchbooks are used by pupils to evidence the design, make and evaluate process, and these are used as a tool to assess pupils in the Summer term each year. We assess against the Chris Quigley Milestones.

8. SEND

In our inclusive classroom we encourage full participation and give encouragement and praise for all levels of achievement. Children are taught the full range of skills and equipment is provided that allows all children to participate in activities and quality learning alongside their peers.

9. The Role of the Curriculum Co-ordinator.

- To monitor the standards of teaching, learning and children's achievements throughout school within DT.
- To be up to date with current educational debate and developments and to pass this on to staff.
- To help and suggest ways forward for staff who seek advice.
- To help recognise and obtain appropriate educational resources that will be useful within the school.
- To stay up to date with ICT and suggest the software and programs that would support staff in their teaching and the children's learning.
- To support staff incorporating the new curriculum into their planning and teaching as well as developing the cross curricular links between DT and Art.

This policy is closely linked with the Overarching Arts Policy, Art and Design Policy and the Science Policy and should be read in conjunction with the schools Teaching and Learning Policy, Curriculum Policy.

Storage of Equipment:

- All DT equipment and resources are stored and clearly labelled.
- The DT storage cupboard is located in the library
- Some DT resources or equipment used for aesthetic properties or effect may be found in the central areas as follows:
 - Art storage unit: 'Luxury' items and resources, for example; glass paints, glazes and varnishes.
 - Sewing cupboard: Sewing needles, pins, cottons, silks, threads, embroidery hoops, beads / buttons / sequins, stuffing / filling materials, fabric paints and a range of fabric (cotton, binca, aida, hessian, felt, off cuts, etc...)
 - Paper store: Card, cartridge paper, crepe paper, tissue paper and foil rolls.
 - Food Technology equipment is stored in both the Foundation Stage storage area and the LKS2 teachers store cupboard (LKS2 run the cooking club). Cookers are found stored in the caretakers store.
- Resources can be moved to individual classrooms during DT lessons so long as they are returned for the next class to use at the end of the session.

Maintaining Resources:

- Teachers must ensure that they resource their next topic before the beginning of the term in which the resources are required.
- The DT subject leader will endeavour to maintain stock.
- Class teachers should inform the subject leader;
 - to identify low stock
 - to identify the requirement of resources not regularly used through school
 - if a specific resource has been exhausted after classes have taken stock for a topic or project (*do not wait for the next person to find that it is gone*).

This should be done in advance so that an order can be placed prior to the resource being needed.

EYFS:

- DT resources for the Reception and Nursery classes are generally specific to them due to the number of children in the provision DT resources for the Reception and Nursery classes are stored in the unit and are ordered in the summer term for the coming school year.
- Reception and Nursery use the same stores of consumable items and the DT store equipment as the rest of the school however when specific resources and equipment are required or stock is low the DT subject leader is informed so that an order can be placed.