

Thorn Primary School

Design and Technology Policy



Intent

Our school vision for Design and Technology:

We, at Thorn Primary, strive for excellence and enjoyment in Design and Technology by providing a safe, secure and caring environment where individuals are valued and respected. We will deliver a curriculum which engages, inspires and challenge pupils, equipping children with the skills, knowledge, concepts and values used by people to tackle the problems of living in our man-made world. Children are given the opportunities to develop technical understanding and making skills, learn about design methods and investigate their environment and the materials around them.

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.

To achieve these knowledge and skills, our key aims at Thorn are:

- To develop children's designing and making skills
- To teach children the knowledge and understanding, within each child's ability, that will be required to complete the making of their product,
- To teach children the safe and effective use of a range of tools, materials and components,
- To develop children's understanding of the ways in which people have designed products in the past and present to meet their needs,
- To develop children's creativity and innovation through designing and making,
- To develop children's understanding of technological processes, their management and contribution to society.

Children will design and make a range of products. A good quality finish will be expected in all design and make activities appropriate to the age and ability of the pupil. The work covered in each year group ensures a balance of:

- Investigative, disassembly and evaluative activities,
- Focused practical tasks
- Designing and making assignments

Implementation

Planning

Teachers use the comprehensive progression skill sheets to plan work. This ensures full breadth and depth of skills. Plans are short-term units of work produced in line with the whole school's agreed format annotated after each lesson with under and over achievers. Design and Technology may be taught as a discrete subject in the case of specific skills or may form part of a wider topic approach with cross-curricular outcomes.

Teaching and learning styles

The school uses a variety of teaching and learning styles in Design and Technology lessons. We do this through a mixture of direct teaching and individual/ group activities. Teaching focuses on embedding the key aims. Teachers draw attention to good examples of individual performance as models for the other children. They encourage children to evaluate their own ideas and methods, and the work of others, to say what they think and feel about them. We encourage the children to ask, as well as answer questions which will help them to investigate and evaluate products they are presented with. They have the opportunity to use various materials, such as wood, plastic and fabric and use these in a variety of ways. The children develop their speaking and listening skills through discussions, evaluations and presenting reports to the rest of the class. They engage in a wide variety of problem-solving activities.

We give children the opportunity within lessons to work on their own and collaborate with others, on projects in two and three dimensions and on different scales. Children also have the opportunity to use a wide range of materials and resources including other artists' work, educational visits and computing to enhance their learning.

We recognise the fact that we have children of differing ability in all our classes, and so we provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies which are differentiated by task, expected outcome and/or support from peers or adults.

Role of a subject leader

The role of the subject leader is to:

- Providing advice to teachers on appropriate resources, teaching strategies and approaches to assessment.
- Monitor teachers' planning as part of on-going subject monitoring and evaluation of practice to identify next steps in curriculum development
- Use feedback from monitoring to develop an action plan for design and technology with realistic and developmental targets
- Audit, identify, purchase and organise all Design and Technology resources, ensuring they are readily available and well maintained
- Compile a portfolio of children's work to evidence progression and examples of good practice for staff to refer to
- Keep up-to-date on the use of Design and Technology in the curriculum • Reviewing the policy as appropriate.
- Keep abreast of recent developments in the subject, attending relevant training and participating in the planning and delivery of school based INSET and discussions.

Impact Assessment

Foundation Stage

Teachers monitor pupil progress through observations on continuous provision and directed tasks. Progress is recorded in pupils' Learning Journeys and then transferred onto the EYFS Profile.

KS1 and KS2

Teachers monitor pupil progress over the course of a unit of work. Progress is recorded on skills progression sheets where over and under achievers are identified. At the end of the year these are transferred to the receiving teacher. An annual report comments on individual progress in Design and Technology. Samples of children's work are also collected by the subject leader to monitor whole school progression. Monitoring takes place regularly through sampling children's work, teacher planning and lesson observations. Teachers assess children termly using children's work and skills sheet. This is passed to the subject leader who termly reviews and tracks data and progress.

Resources

Subject leader liaises with class teachers to order specific resources relating to the next academic years themes and skills for each year group. All classrooms are equipped with paintbrushes, PVA glue, sketch pencils and coloured paper as well as specially ordered resources. The art stock cupboards are located in the entrance area and upper key stage 2 corridor hold general art stock – sugar paper, card, paper, materials, oil pastels, paints, and glitter. The libraries are also stocked with useful books relating to artist and techniques. Design and Technology stock is found in the Library upstairs.

Health and Safety

A safe working environment and ways of working need to be encouraged from the earliest stage and safe practices should be understood by voluntary helpers. All areas must be in the direct vision of the teacher and there should be enough space for each child and group to work comfortably. Teachers should be aware of any physical limitations which a pupil may suffer e.g. height disability, poor eyesight or hearing, and make suitable arrangements to allow the pupil to operate sensibly.

Working with Food

Cooking utensils and work areas should be kept meticulously clean. Children should learn simple personal hygiene rules such as wearing a clean apron, washing hands before handling food and not eating food as they are cooking.

Tools

Tools which present a safety hazard, such as glue gun, or a craft knife need to be secured away from general tools and regularly checked.

See appendix for information on training children to use tools correctly.

Appendix

Children should be trained to use tools correctly

1. Saws

Never saw directly on the table. Always use a bench hook or G-cramp the material in some way. Show the children how to start a saw cut by drawing the saw towards themselves to make a notch. When sawing the effort is needed on the push stroke. Keep your hand and arm in line with the saw cut. Support the material when nearly finished to prevent splintering.

2. Drills

Children need to be shown how to change twist drills, how to hold a hand drill and how to keep it at right angles to their work. When drilling, turn the handle in a clockwise direction and continue turning the same way when removing the drill bit from the hole.

3. Glue Guns

Children should experience a variety of ways of joining materials other than with a glue gun. However, a glue gun is very useful for joining wood, metal and certain plastics. It is recommended that the glue guns should be used by children from KS2 onwards under close supervision of an adult.