



Copnor Primary School **Design and Technology Policy**

The purpose of this policy is to explain the way Design and Technology (referred to as DT) is taught at Copnor Primary School. It will explain the school's rationale for teaching this way and also explain why DT is an essential part of our curriculum.

Policy Availability

The policy will be uploaded onto the school website. It is also available as a paper copy. To obtain a copy, please contact the school's office.

Rationale

Design Technology at Copnor Primary School is designed to stimulate creativity and imagination. Children will have opportunities every year to create items that are purposeful and build skills that will be useful in their future lives. It provides visual, tactile and sensory experiences and a unique way to responding to the world. Children will learn to make informed value judgements and aesthetic and practical decisions. DT is a means of personal expression and often has a positive impact on a child's wellbeing and mental health.

While it is essentially a practical subject, Design and Technology should provide opportunities for reflection and pupils should acquire the ability to make informed, critical responses to their own work and that of others.

Our Aims

At Copnor Primary School, Design and Technology aims to ensure that all pupils:

- To enable all children to have access to a varied range of high quality DT experiences.
- To provide imaginative and innovative planning and teaching which will foster enthusiasm for DT amongst all the children.
- Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
- To develop imaginative thinking in children to enable them to talk about what they like and dislike when designing and making.
- 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 and uses.
- 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 develop a positive attitude towards problem solving tasks.

Provision

Design and Technology is taught on a termly basis with Art and Design being taught for one half-term and Design and Technology the other half-term.

The school uses a variety of teaching and learning styles in Design and Technology lessons in order to develop children's knowledge, skills and understanding.

Teachers provide a practical curriculum which involves children in meaningful activities in which they are required to discuss, plan and evaluate their own and other's work in a constructive way.

Across projects, children are given the opportunity to work individually, in pairs and in group situations. Children also have the opportunity to use a wide range of materials and resources, including ICT and will be supported to use tools and equipment safely and responsibly.

Teachers will use the National Curriculum and progression of skills to plan age appropriate, engaging lessons that ensure designing, making, technical knowledge, evaluation are taught progressively through the school, each topic will have a particular focus.

KS1 & KS2 provision

To ensure that all aspects of the National Curriculum are covered adequately and taught in sufficient depth, long-term planning includes topics that address food, textiles, construction and movement in KS1 and food, textiles, construction, movement and electrical systems in KS2.

Teachers will ensure that two or three DT projects are planned in their year group. All topics are taught in blocks to aid the continuity of lessons and enable a focus on the process as well as the end product; allocating approx. 9 hours per topic. Design Technology is taught separately to Art whilst being aware of the cross overs between the subjects we endeavour to ensure that DT is purposeful and exists for the purpose of others whereas Art has no set process and exists for its own purpose. We produce and refer to the design criteria to think about the end product and to ensure that we are designing and creating a useable product which answers the questions posed by the end user.

Early Years Provision

Children within Reception at Copnor Primary School will be provided with many varied opportunities to support their learning. These include:

Constructing: Learning to construct with a purpose in mind, all children use scissors, glue, string, wood and card.

Movement: Children have opportunities to explore construction kits, such as Lego and Popoids.

Food: Children will practise stirring, mixing, pouring and blending ingredients during cookery activities. They will explore different foods and taste new foods.

Textiles: Children will use a variety of materials and be able to discuss the purpose, practicality and textures.

Using a range of tools: children will learn about planning and adapting initial ideas to make them better. For example, a child might choose to use scissors, a stapler, elastic bands and glue to join bits together to make a toy vehicle. However, they might then modify their initial idea by using masking tape.

At Copnor Primary School, we also have the provision for woodwork in the Early Years provision: they are able to use drills, saws, hammer and nails, mallets to develop their fine and gross motor skills.

Pupils with SEND, including the more able

To ensure children with SEND, including the more able get the same learning opportunities, tasks are differentiated to provide appropriate levels of challenge and support. For example, visual and concrete aids are provided to allow children to achieve to a desired outcome successfully. Adult and peer support is used, when necessary, to scaffold learning and specialist equipment is provided where needed e.g. saws with different grips.

Roles and responsibilities

The governing body will approve the Design and Technology policy and hold the headteacher to account for its implementation. Although the DT leader/leaders will support the teaching and carry out monitoring of DT across the school, the headteacher is responsible for ensuring that DT is taught consistently across the school.

Staff

The subject is planned and taught by the staff using the school's medium term plans and the Design and Technology knowledge and skills progression document. Year leaders and the DT leaders are to review standards and monitor curriculum provision across the curriculum.

Pupils

Pupils are expected to aspire and achieve in all curriculum subjects. They are provided with clear steps to success for each topic which they should strive to meet at an appropriate level for them.

Parents/Carers

Parents are expected to support their child in their learning where necessary, for example in topic DT homework tasks, so that the work is produced to a good standard.

Assessment, recording and reporting

Work in Design and Technology may be assessed through judgements of recorded work but a large proportion of assessment is involved with practical application and language development involving discussion, description and explanation skills. Evidence may be seen in class books and through photographs and drawings of 3D models. Teachers will continuously assess during lessons to address misconceptions and any difficulties children may be facing. Additional time should be provided to cover the skills that pupils need, and support given where needed. Formative assessment will ensure that children are following the six principles of Design Technology, thereby concentrating on the: User, Purpose, Functionality, Design Decisions, Innovation and Authenticity. For more information on these, please visit

<https://www.data.org.uk/media/1130/school-curriculum-principles-for-dt.pdf> (a copy of which is also available with this policy)

Resources

A selection of materials and resources, including tools are available for children's use to enable them to access the subject and make informed choices. Teachers will assess what resources they will need prior to the project and make the order for any additional items. The DT subject leader/ leaders will audit resources yearly and will also liaise with year leaders to ensure that appropriate equipment and resources are available.

Food specific hygiene and health and safety in DT

A safe working environment and ways of working need to be encouraged from the earliest stage. 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. They must then make suitable arrangements to allow the pupil to operate safely.

Teachers teach the safe use of tools and equipment and insist on good practice prior to starting the making part of a task. However, safety issues do arise when teaching this subject. Therefore, before a child completes an activity where there is an associated risk in DT, the class teacher will ensure that the health and safety rules for the activity/ equipment being used have been discussed with the children.

The potential areas where an accident could occur, include:

- The use of electrical equipment such as glue-guns: children should wear suitable eye protection and use low temperature glue-guns with the 1:1 supervision of an adult. They will be taught not to touch the hot glue end of the glue-gun and what to do in order to safely store the glue-gun between uses.
- Contact with sharp objects including wood, nails, needles, saws, knives etc. will be discussed with ways to ensure safe handling discussed.
- The handling of food stuffs: children need to ensure they are aware of personal hygiene rules such as wearing a clean apron, washing hands before handling food, storing perishable foods appropriately, not mixing cooked and raw foods etc.
- The safe use of cooking appliances, including ovens and hobs.

The school has produced risk assessments for activities where there is a risk of harm through the use of electrical appliances saws and other equipment used in DT. The DT leader/leaders will ensure that year leaders are provided with the necessary masters for the risk assessments provided at the start of each unit of work.

It is the duty of all staff to:

- Recognise and assess the hazards and risks to themselves and others when working with food and other materials in DT.
- Take action to control these risks and hazards.
- Complete a risk assessment/ read the risk assessment prior to practical lessons to ensure that pupils are safe when using tools and to minimise the risks of cross contamination if they are the teacher/TA conducting the DT lesson. They will use the school's risk

assessments and adjust these based upon their class environment, the individual children in the class and also their own experience. Where a teacher/TA feels that they are not appropriately trained to undertake an activity, they are to seek support from their year leader who will organise for the appropriate training/support.

Teachers should be aware of the following:

- Children must not use cooking appliances unless under direct supervision from a responsible adult. The portable oven may be used in an area away from the children.
- Saws and other sharp objects (nails, needles, craft knives, etc) must be used under direct supervision. The teacher will make a judgement on the undertaking of activities involving sharp and/or potentially dangerous equipment depending on the age/ability of the children. Some activities may be undertaken by an adult or in a small group or one to one situation as appropriate. Glue-guns will only be used under 1:1 direct supervision.
- All batteries should be zinc carbon or zinc chloride; therefore, rechargeable, lithium or alkaline batteries should not be used as these can get very hot if short-circuited.
- Perishable foodstuff must be stored sensibly and refrigerated if necessary. Care must be taken to ensure food is not used after the given sell by/use by date and that raw and cooked food must not be mixed.
- Children must wash their hands before and after any contact with food and other potentially harmful substances.
- Teachers must take into account food allergies such as nut allergies and should be aware of the location of any medication for the allergy. These allergies should be clearly noted on the risk assessment, with parental/carer permission provided before food tasting/food preparation is completed.

Monitoring

Each child has a topic book where their DT work is recorded. Samples of children's work are collected by the DT leader/leaders to check the standards of the work completed for children of different abilities. Monitoring takes place half-termly through sampling the children's work, teachers' planning and through lesson observations and learning walks. Monitoring will be completed by the year leaders in conjunction with the DT lead/leads and the senior leadership team.

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