



## Dallimore Primary and Nursery School Design and Technology Policy

### Design and Technology Policy

This policy is a statement of the aims, principles and strategies for the teaching of Design and Technology at Dallimore Primary School.

### What is Design and Technology?

Design and Technology is a 'hands on' subject in which pupils have the experience of evaluating, designing and making products of a high standard. Design and Technology encourages children to examine their environment, question the world and to think about how and why things work the way they do.

Design and Technology presents children with a series of real life scenarios, where children become autonomous creative problem solvers. The children will combine practical exercises with the more abstract notions of aesthetics, functional design and making skills. As they do this they will develop their ability to evaluate past and present designs, the uses they have and the impact they have on the real world. Through their Design and Technology, children become more focused on what makes a successful product and more imaginative in how a product could be made or improved.

Design and Technology should draw on the child's knowledge and experience from other subject areas particularly Literacy, Numeracy, Science, Art and ICT.

Design and Technology should always be a relevant, enjoyable and creative activity for all children.

### **The aims of Design and Technology are:**

- To provide an opportunity for all pupils to become discriminating and informed users of products and to become innovators.
- To develop imaginative thinking in children and to enable them to talk about what they like and dislike when designing and making;
- To develop in children an understanding of the designing and making process, the need to evaluate existing ideas and products and an ability to work through the D&T process confidently.
- To ensure that children are able to identify opportunities for design and technology activities by observing more closely the objects around them.
- To make children more aware of the ways in which everyday objects have been designed and made.

- To enable children to become more confident and skilled in using the range of tools and materials available in the school, whilst following safe procedures.
- To ensure that by the end of key stage 2 children are able to work more independently, and with confidence on design and technology.

### **How is Design and Technology taught at Dallimore?**

- At Dallimore Primary School the children are taught as part of a cross curricular approach which ensuring complete coverage of the National Curriculum. This approach will encourage the processes of designing, making, evaluating and foster creativity.
- Design and Technology will be taught either in blocked weekly sessions or in a condensed two or three day time frame where appropriate; for example the topic of bread may be better suited to a condensed time frame where as making moving cars would be better taught of a period of weeks. Individual class teachers will decide whether or not their topics will be taught over a period of weeks or whether to teach it in a condensed period.
- When evaluating their own learning, children should refer to the design criteria established in the design brief as their basis for deciding on how good their product is.
- The emphasis in Reception is for children to be encouraged to examine and talk about everyday objects and give possible reasons for why things are made the way they are.  
They will also be given opportunities to handle and use a wide range of materials, developing their knowledge and understanding of these through practical design and make activities. There will be more teacher direction within design and technology activities within the reception class but this support will decrease as children move through key stages 1 and 2.
- During their experience of Design and Technology the children are introduced to a variety of contexts including, home, recreation, industrial and community.
- Opportunity is provided for each child to experience construction, graphic media each year. Children will have opportunities to experience textile and food technology at least once during each key stage.
- The learning undertaken should be practical and relevant for all children, fostering enjoyment, satisfaction and purpose in designing and making.
- Teachers use opportunities within Design and Technology to challenge stereotypes. They differentiate activities to ensure that the specific needs of individuals are best met and that children with special educational needs will be given the opportunity to undertake design and technology activities.

- At Dallimore, children will be encouraged to use data handling, word processing, graphics and spreadsheets to facilitate and enhance their design and technology.
- While resources are stored in a central storage area, where possible children should be presented with a choice of tools and resources so that they are best able to meet their designs effectively. (For appropriate use of resources please refer to the Health and Safety section of the policy.)
- Opportunities will be made each year to celebrate achievement in Design and Technology as a whole school community, either through Arts week, Design and Technology days, Enterprise events or similar occasions.

## Pupil Assessment

The assessment of pupil work and progress is on-going by the class teacher; this includes observation of pupils working, appropriate questioning and evaluation of any recorded work

produced. This not only informs future planning but provides information for pupil's records, parent discussions and annual reports. Assessment grids are kept and regularly updated to record children's progress in each year group. Data is transferred onto our central system to track progress throughout the school.

## Health and Safety

While individual class teachers must judge for themselves whether or not their class is able to use a particular resource the following guidance must be adhered to:

**Clamps/Pliers/Vices/Punches:** Children may use these pieces of equipment when their strength of grip enables them to operate the tool. N.B. eyelet punches require a considerable amount of strength to control so should be used only by teachers or older children.

**Cookers:** Once instruction has been given, children may be allowed to operate the cooker under close supervision.

**Hand drills:** These may be used by children after training under supervision. When the teacher is satisfied that the child has become competent in the use of this tool they may use the drill in the classroom by themselves (Unsupervised in KS2 only).

**Mini Drills:** To be used by KS2 children after training under supervision.

**Power Drills:** Not for classroom use.

Where possible drills should be in a stand and the material should be clamped to a surface.

**Safety Glasses:** These should be worn when there is a risk of damage to the eyes.

**Food Hygiene:** Children should be made aware as early as possible of the need for hygienic food preparation. Teachers should train the children to prepare food hygienically and supervise preparation.

**Wood Adhesive:** This should only be used by the teacher or under direct supervision

**Wallpaper paste:** This glue may be used after training and then under general supervision.

**Solvent Glues:** While the LA allows use of solvent based glues after training and under close supervision, it is the recommendation of this policy that children use only water based glues.

**Glue Guns:** Only low temperature glue guns are used. They should be used by the teacher only until years 5 and 6, where they may be used by the child under close supervision of an adult.

**Hammers:** Children may use a hammer as soon as their motor skills allow them to hit the nail accurately and as soon as they are disciplined enough to stay on task. Smaller weight hammers are sufficient for most jobs in the classroom. Claw hammers and Club Hammers are not for use in the classroom.

**Knives:** While use of scissors is preferable, children may be required to use knives for their Design and Technology work. They should only be used by older children and can be used once they have learnt the rules, techniques and skills for cutting. They should be closely supervised while working with a knife.

**Paints:** Children should use water based paints only. These may be used under general supervision. Emulsions (house paints) should be used by adults only or with older pupils under supervision.

**Plastics:** Plastic sheeting should be cut using scissors and may be used at any age where the pupils are competent with scissors. Years 5 and 6 may sand plastics but only after training and under supervision. Hot wire cutters should only be used by a competent teacher.

**Sandpaper/Emery paper/Files:** Sanding and filing may be carried out using these tools under general supervision as soon as the children's motor skills are sufficient.

Saws – Hand

**Hacksaws and Junior Hacksaws:** These are suitable for most jobs and may be used by the children providing they have undergone some training and have the appropriate motor skills.

**Paper cutters:** These should be used by the youngest pupils until they have the motor coordination to use scissors.

**Blunt ended scissors:** These may be used as soon as the children can actually handle them under general supervision.

**Safety snips:** These may be used under general supervision once the children can be relied upon to use the correct techniques.

**Left handed scissors/snips:** While most children are right handed left handed scissors and snips should be made available for left handed children.

**Nails and Pins:** These may be used under general supervision once the children have been trained in their use.

**Sprays – Paints/Fixatives:** These should only be used by adults in well ventilated areas. They should not be used in the presence of children.

**Staplers:** Mini staplers may be used by children under general supervision. Heavy duty staplers may be used under close supervision until the children are competent. Electric staplers are never to be used in the classroom. Staple guns are to be used only by trained adults.

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