

Holy Family Catholic Primary School Design and Technology Policy

Rationale

Design and Technology encourages children to become creative problem-solvers, both as individuals and as part of a team. Using creativity and imagination, pupils design and make products that solve real and relevant problems, within a variety of contexts. Pupils learn perseverance, to take risks, become resourceful and enterprising. Through the study of design and technology, children develop a greater awareness and understanding of how everyday products are designed and made. They combine practical skills and knowledge of materials and processes, with an understanding of aesthetic, social and environmental issues; they develop a critical understanding of the impact of past and present technology on daily life. Our children develop the ability to be discriminating and informed consumers, and potential innovators making a contribution to creativity and culture within society. Design and Technology makes links across the curriculum, involving Scientific knowledge and skills, Mathematical problem solving, English instruction writing and design using ICT, as well as enhancing learning in History and Geography, as seen in our curriculum.

Aims

- To foster enjoyment, satisfaction and purpose in designing and making.
- To develop knowledge, understanding and skills in order to design high quality products.
- To develop imaginative thinking and problem solving in children.
- To enable them to talk about what they like and dislike, and why, when designing, making and evaluating.
- To draw, model and annotate their designs, taking into consideration the purpose and audience.
- Provide opportunities for satisfaction and achievement, at all levels, standards and capabilities.
- To encourage children to select and safely use appropriate tools and techniques for making a product.
- To use ICT software to assist our designing and learning.
- To enhance learning across the curriculum.
- To understand aesthetic, social and environmental issues.
- To develop the skills of budgeting, resourcefulness and perseverance.
- To understand and apply the principles of nutrition and learn how to cook.

Teaching and Learning

The school uses a variety of teaching and learning styles in design and technology lessons. Our principal aim is to ensure that the children apply their knowledge and understanding

when developing ideas, planning and making products and then evaluating them. The school does this through a mixture of whole class teaching and individual/group activities. All ideas will be treated with respect. Children critically evaluate their own work and that of others. They have the opportunity to use a wide range of materials and resources, including ICT.

Children will be given the opportunity to work within four main areas of development during each topic:

- Investigative, disassembly and evaluative activities: These activities provide opportunities for the children to explore existing products and to gain skills, knowledge and understanding which can be applied in a design and make assignment.
- Focused practical tasks: Focused practical tasks provide opportunities to learn and practice particular skills and knowledge.
- Design and make assignments: A design and make assignment provides an opportunity for the children to combine their skills, knowledge and understanding to create products for a purpose, using a range of resources.
- Evaluation: At the end of each assignment the children will be encouraged to evaluate their final piece to show what was successful and what needs to be improved.

Curriculum and Planning

The school carry out the curriculum planning in design and technology in three phases: long, medium and short term. The long-term plan maps out the units covered in each half term during each key stage. Cooking and nutrition is included for two half terms in every year group. This is on a two year cycle to ensure it meets the needs of mixed age classes. Teachers aim to link Design and Technology to a topic being studied to give it a purpose and extend and enhance the curriculum. Meaningful assignments set within familiar contexts are used by class teachers. The children will have the opportunity to work individually, in small groups and as a whole class in their classrooms. Our medium term plans give details of each unit of work for each term. They identify learning objectives and outcomes for each unit, and ensure an appropriate balance and distribution of work across each term. The class teacher plans for individual lessons and keeps a copy of these. Each topic will need to be reviewed, informally by the teachers and teaching assistants within the year group or Key Stage to ascertain the enjoyment had by the children, the effectiveness of developing skills and the quality of purpose.

Differentiation

Activities will be appropriate to the age and stage of development, with children being challenged and supported at an appropriate level. We give children of all abilities the opportunity to develop their skills, knowledge and understanding and we also build planned

progression into the scheme of work, so that the children are increasingly challenged as they move through the school. We teach design DT to all pupils and we provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's different needs. Where children have fine or gross motor difficulties, they will be supported or the task will be adapted to enable all children to succeed.

The DT coordinator will keep a record of children who are identified as Gifted and Talented. Children who have been identified as Gifted and Talented in D&T should be provided with opportunities to take part in any extra-curricular activities, such as making costumes or props for performances. There will also be chances through the year to develop and enhance peer learning and contribute to displays around school.

Resources

DT requires an extensive range of resources both durable and consumable. Our school will be reviewing the resources needed during the first year of the updated policy. During the second and following years, DT equipment will be evaluated and ordered as necessary, particularly where food technology takes place. It is the responsibility of each class teacher to collect resources and then return them after use to the DT cupboard. If any resources are broken during use, the DT coordinator needs to be informed as soon as possible.

Assessment and Recording

Class teachers will be responsible for the assessment and recording of pupil's DT capabilities and achievements. These achievements must be praised and rewarded as would any exceptional achievements in other subjects. Teachers assess work in DT by making observations of the children working during lessons. They record progress made against the learning objectives for that lesson. At the end of a unit of work, children undertake a review of their work that focuses upon an evaluation of the finished product and an overview of the various tasks undertaken. Due to the practical nature of design and technology, evidence of work undertaken by children can be in the form of teacher's notes or as a photographic record. Samples of the design process and end product are also valuable evidence. The DT subject coordinator can review evidence of the children's work in their books. Parents will receive a written report detailing the coverage and attainment with regards to the National Curriculum at the end of the Summer term.

Monitoring and Review

The monitoring of the standards of children's work and of the quality of teaching in design and technology is the responsibility of the design and technology subject coordinator. Their work also involves supporting colleagues in the teaching of this subject, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. Half termly reviews of DT across the school will take place,

focusing on one of the following: short observations of teaching and learning, pupils' work, pupil interviews, planning, differentiation and overview of the year.

Health and Safety

In teaching certain practical elements of D&T to pupils, we recognise that safety is a key issue. All safety precautions must be taken, informed by CLEAPSS and in line with Holy Family Catholic Primary School's Health and Safety Policy. This is done by recognising health and safety in the classroom organisation and, furthermore, by giving children guidance on how to use the equipment provided. Monitoring the pupils in small groups helps overcome the problems of safety when using potentially dangerous D&T equipment. When writing schemes of learning or lesson plans, staff will note down any relevant and important health & safety information

The staff work towards the School's aims by:

- carrying out risk assessments as needed
- being vigilant and careful role models;
- promoting a spirit of safety consciousness among children ensuring that they understand the need for codes of practice;
- helping children to understand their responsibilities in taking reasonable care for their own safety and that of others;
- taking quick , firm action to ensure that children are not allowed to jeopardise their own safety or that of others;
- providing opportunities for children to discuss appropriate Health and Safety issues.

The children work towards the School's aims by:

- developing a growing understanding Health and Safety issues;
- contributing to the development of codes of behaviour and conducting themselves in an orderly manner in line with these codes;
- taking responsibility for maintaining a safe and healthy environment for their own safe conduct within it.

Hazardous Substances Agreed Practice

- Careful siting of equipment to avoid trailing leads or other hazards;
- Visual checks of plugs for cracking or loose wires;
- Annual checks on portable appliances;
- Inclusion of curriculum time to discuss electrical safety with children.

Working with Food

*An adult will be required to supervise activities involving cooking and food handling/preparation.

- *When undertaking food activities the appropriate Health and Safety Procedures must be adhered to.
- *When working with food all children should follow personal hygiene guidance (all jewellery including watches to be removed and hair is to be tied back, use of blue plasters and washing hands)
- *Teachers should check the dietary needs of the children in their class to identify any foods that should not be available to specific children, or groups of children.
- *Any perishable food should be stored in a fridge.
- *Ensure that the tables are wiped down with antibacterial liquid before and after cooking.
- *Only use equipment set aside to use with food.
- *Teachers and children need to be very aware and vigilant of the risks when allowing children to use sharp knives. Children need to be taught how to use them properly and safely.
- *Teachers taking part in any food activity should dress appropriately and follow the same procedures as the children with regard to any rules regarding personal hygiene.
- *Ensure that all equipment is cleaned and put away.
- *Ensure that all children use their own equipment when tasting food.
- *Certain spoons should be identified and used when placing food onto plates for children to taste food, teachers/TA's need to ensure children do not use their own.

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