Saint Clare's
Catholic Primary School

Design and Technology Policy

Member of staff responsible: Mrs Martin
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The Intent of our Design and Technology Curriculum

Mission Statement

St Clare's is a Christ-centred family where everyone is valued and respected. We learn and grow, whilst strengthening our relationship with God and one another. Together in His love, we can achieve our full potential.

Play, learn and grow together with Christ

D&T in primary schools develops young children's skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food. D&T encourages children's creativity and encourages them to think about important issues.

DATA (The Design & Technology Association), www.data.org.uk

The development of Design and Technology proficiency at St. Clare's is achieved through opportunities and experiences across the curriculum. The curriculum enables pupils to take part in a broad range of practical activities directly concerned with:

- identifying needs
- generating ideas
- planning and designing
- making and testing
- evaluating

Through creativity and innovation, design and technology continue to shape our lives. Using an activity-focused approach, a high-quality design and technology education should give pupils opportunities to create, innovate, design, make and evaluate a variety of well-crafted products. Pupils should be taught the technical skills and craftsmanship to execute practical tasks, thereby developing confidence in using these skills .

National Curriculum 2014

Design and Technology is a way of learning, which spans and links the whole curriculum. In primary school it has its roots in imaginative play, art and science. Specific Design and Technology research topics will be undertaken in accordance with St. Clare's long-term curriculum plan. Teachers will also present children with additional Design and Technology opportunities in other areas of the curriculum.

Aims

We aim to help our children at St. Clare's develop:

- Enjoyment and pride in their technological and creative abilities.
- Understanding and knowledge related to the practical and aesthetic aspects of their experience of the world around them, including the influence of technological achievements of different cultures, past and present.
- A keen interest in creating and developing functional and decorative design ideas.
- Manipulative skills using a range of tools and materials.

- A deeper understanding of the principles of nutrition and cooking skills.
- Personal qualities of confidence, creativity, perseverance and self-evaluation.
- The communication, co-operation and collaboration skills required to work as a member of a group.
- An awareness of the needs and safety of others.

The Implementation of our Design and Technology Curriculum

We follow the National Curriculum programme of study as the basis of all our planning and we predominantly, but not exclusively use the Lancashire Planning for our topic subjects. We plan our design and technology topics within a creative curriculum, that ensures they build upon prior learning. Children of all abilities have the opportunity to develop their skills and knowledge in each unit and, through planned progression built into the scheme of work, we offer them an increasing challenge as they move up the school.

Early Years – Little Saplings and Rowan Class

Our early years environments provide an important foundation for the development of design and technology capability. It extends and broadens the child's home experience, enabling the child to explore a wide variety of materials: sand, water, construction kits, food, paper, wood, textiles, play dough, plasticine, reclaimed materials etc., and to develop skills with simple tools. Some of these experiences will be structured and the children will be encouraged to talk about their observations and ideas with the adults working with them.

Key Stage 1

The children will carry out more structured activities based around a curriculum theme. They will explore and develop skills in designing, making and evaluating a product.
For example*: healthy diet, smoothies, healthy salads, cooking around the UK, moving pictures, castles, moon buggies, puppets and playground equipment*.

Children will also develop their technical knowledge in areas such as:

- designing a product for a specific purpose
- generating and communicating ideas
- cutting, shaping, joining, finishing (with support and independently)
- selecting appropriate tools and materials for their chosen design
- exploring and evaluating a range of existing products
- using simple mechanisms in their products
- testing and improving their product
- evaluating their finished product against a given criteria
- understanding where food comes from
- preparing food based upon a healthy and varied diet

Key Stage 2

The children will build upon their knowledge and skills developed in EYFS and Key Stage 1. They will base their design ideas and products on a specific KS2 curriculum topic.
Children will also build upon and develop their technical knowledge in areas such as:

- researching and developing ideas based on a specific design criteria and audience
- generating and communicating ideas through sketches, diagrams, prototypes and ICT

- selecting *appropriate* tools and materials from a wide range
- cutting, shaping, joining and finishing *accurately*
- investigating and analysing a range of existing products
- improving and strengthening complex structures
- using more complex mechanisms such as pulleys, gears, cams, levers, linkages and electrical systems
- using computing programs to design, build, monitor and assess their product
- evaluating their product using a design criteria and using peer assessment to review and improve their product
- understanding how individuals and key events have shaped the world in relation to Design and Technology innovation
- understanding the importance of a healthy and varied diet for health and well-being
- preparing and cooking savoury food using a range of techniques
- understanding seasonality and food provenance

Cooking and Nutrition has become a greater part of the Design and Technology curriculum in the recently revised National Curriculum of 2014. Pupils are expected to develop a variety of cooking skills, their nutritional knowledge and to foster a love of cooking as a crucial life skill.

Inclusion

All children should have the opportunity to work with a range of materials, tools and techniques, regardless of ability. Specific tasks should be differentiated, as and when necessary, to meet individual needs. Staff should be aware of and sensitive to medical conditions (e.g. allergies) and different beliefs and practices within the school and local community which might affect their work with food, materials or design. The Design and Technology teaching and learning at St. Clare's Primary School should reflect the fact that there are equally valid and appropriate solutions to problems which reflect the needs and beliefs of different cultures, past and present.

Special Educational Needs

The Design and Technology curriculum should fulfil the needs of all pupils. When planning work for children with special educational needs, due regard is given to the information and targets contained in the children's Individual Education Plans (IEPs). We have high expectations of all of our children, and ensure that learners have high expectations of themselves.

Racial Equality & Equal Opportunities

All children have equal access and inclusive rights to the curriculum regardless of their gender, race, disability or ability. We plan work that is differentiated for the performance of all groups and individuals. St. Clare's is committed to creating a positive climate that will enable everyone to work free from racial intimidation and harassment and to achieve their full potential.

Health and Safety

Safety is of paramount importance in Design and Technology. It is the teacher's responsibility to be aware of safety issues in all Design and Technology activities by:

- Providing a safe working area (furniture, materials storage, tool maintenance)
- Teaching and implementing safety rules and good practice, including hygiene
- Ensuring the safe and correct usage of tools and materials
- Ensuring working areas are kept clean and tidy
- Considering storage of partially completed work
- Ensuring the correct disposal of waste

The teacher is responsible for ensuring that children are adequately supervised when using tools and that other adults working in the classroom understand safety rules and maintain rigorous safety standards. Risk Assessments for the use of tools and equipment are completed and are in our health and safety folder. All staff are briefed by the

teacher on specific health and safety rules to be observed by staff and pupils. Safety rules and safety issues should be taught to *all children* within each Design and Technology unit of work.

Cooking and Nutrition

When working with food:

• An adult will be required to supervise activities involving cooking and food handling/ preparation.
• When working with food all children should follow personal hygiene guidance.
• Teachers should check the dietary needs of the children in their class to identify any foods that should not be available to specific children.
• Only the equipment which is for food use only, should be used.
• Ensure that all children use their own equipment when tasting food.

The Role of the Design and Technology Coordinator

The Design and Technology coordinator is responsible for:

- reviewing and updating St. Clare's policies relating to Design and Technology
- maintaining centrally stored tools and materials
- monitoring standards of achievement and progression
- updating the portfolio of evidence
- the coordination of assessment of Design and Technology
- assisting and advising in the teaching of Design and Technology across the school

Assessment, Monitoring, Recording and Reporting

The subject leader works alongside senior leaders to monitor standards of teaching and learning. A structured cycle of planning and work scrutiny, observations, and pupil interviews will provide information to judge the effectiveness of the subject as well as future development points.

Parental Involvement

Parents receive an annual overview of topics to be taught at the beginning of each year, and a termly topic map via the school website. Any specialised knowledge and willingness to come into school is welcomed.

The Impact of our Design and Technology Curriculum

Children will have clear enjoyment and confidence in Design and Technology that they will then apply to other areas of the curriculum. Through carefully planned and implemented learning activities the pupils develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. They gain a firm foundation of knowledge and skills to see them equipped to take on further learning in High School. Pupil's skills and knowledge are assessed ongoingly by the class teacher, throughout lessons and a summative assessment is completed termly. This informs the Design and Technology coordinator of any further areas for curriculum development, pupil support and/or training requirements for staff. EYFS pupils' progress and attainment tells us whether each individual child is below expected, at expected or above expected attainment for their age.