



St Ambrose Catholic Primary School

'Follow the example of Jesus'

Design and Technology Policy

Signed _____ Chair of Governors

Signed _____ Headteacher

To be reviewed and revised in December 2020

MISSION STATEMENT

Follow the example of Jesus

To do this we will:

- Show respect by being friendly to everyone, looking after everything that God has created and treating everyone as we would like to be treated ourselves. (Christ centred)
- Provide a high quality education which enables everyone to reach their full potential within a caring and supportive environment. (Education)
- Celebrate the school's place in the community and the wider world. (Community)

Objectives:

(Christ Centred)

- Provide quality collective worship and enriching liturgical celebrations.
- Enable our children to acquire an excellent religious education, through a well taught and resourced Come and See programme.
- Encourage all to develop their understanding of and relationship with God, while at the same time respecting that others choose to express their faith in different ways.
- Be positive role models, who treat each other with respect and are willing to forgive and be forgiven.

(Education)

- As teachers, to be both inspirational and creative so that every child's achievements are recognised and celebrated and that they are encouraged to become independent learners.
- To provide a safe and happy learning environment so that every child feels valued and secure within our school family.
- To encourage regular communication with parents by creating a positive and caring support network for the extended school family.

(Community)

- To join with the parish and local community to celebrate special occasions throughout the year.
- To enhance the curriculum by uniting as one all of the generations in the community and fostering mutual respect.
- To provide opportunities for the children to visit places of interest and experience a range of different cultural events in order for them to gain a better appreciation of the world around them and to 'fire' their own aspirations.
- To participate in charitable activities and be able to empathise with the needs of others.

Our Vision for Design and Technology at St. Ambrose

Design and Technology is an inspiring and practical subject. Using creativity and imagination, children at our school design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

In line with the national curriculum for design and technology, our aims are 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.

Teaching and Learning

Through careful planning and preparation we aim to ensure that throughout the school, children are given opportunities to:

- Plan, develop and communicate ideas, through talking, drawing and writing.
- Work with a wide range of tools, equipment and materials to make products of increasingly good quality.
- Evaluate what they are making and the finished product, saying how they think it can be improved.
- Increase their knowledge and understanding of materials and components.

Our staff have high expectations of all children, irrespective of ability, and encourage them to be successful and achieve their full potential. Where LSAs are available, they are used to support individuals or groups within the class.

Planning

Class teachers organise the teaching as a discrete subject timetabled for each class. Time is managed effectively and creatively allowing pupils sustained time for work. Within this approach, subjects are blocked in order to facilitate better quality learning. This is achieved by providing a sustained and concentrated approach, leading to a deeper learning experience.

EYFS

Foundation / Early Years planning is based on the children's current interests and needs. Design and Technology in the Foundation Stage is an integral part of the topic work covered during the year. We relate the technological aspects of the children's work to the objectives set out in the Early Learning Goal – exploring and using media and materials. Within the Foundation Stage Unit,

there is a designated 'Creative Area' for children to access resources and activities independently as well as during adult directed tasks.

Key stage 1

When designing and making pupils are taught to:

Design

- purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles] in their products

Key stage 2

When designing and making pupils are taught to:

Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional diagrams and prototypes.

Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world

Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]

Cooking and nutrition

As part of their work with food, pupils will be taught how to cook and apply the principles of nutrition and healthy eating.

Pupils will be taught to:

Key stage 1

- Use the basic principles of a healthy and varied diet to prepare dishes.
- Understand where food comes from.

Key stage 2

- understand and apply the principles of a healthy and varied diet
- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.
- Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Subject curriculum map: see website

Assessment

Class teachers are responsible for assessing the development of individual pupil's skills.

Assessment is ongoing throughout the block of teaching for this purpose. These records are given to the subject leader and are saved on the staff shared drive for the next teacher at the end of each year.

Cross-curricular opportunities

At St. Ambrose, Design and Technology includes delivery as part of other curricular activities, making links wherever appropriate. Also as part of extra-curricular activities such as visits to museums and visitors.

Children with special needs have equal access to resources and materials. Activities are differentiated when necessary to ensure the needs of pupils are best met. Work produced by all pupils is valued and celebrated through display, assemblies and class activities. Children who show particular aptitude are identified, encouraged and given opportunity to flourish.

Marking

Marking should be both diagnostic and summative and school policy believes that it is best done through conversation with the child but acknowledges that constraints of time do not always allow this. A comment made on the technique achieved is used to assess immediate understanding.

Pupils' records of their work

Children are encouraged to work neatly and methodically when recording work in sketchbooks. Children should be encouraged to approach investigations in a way that suits their learning e.g. drawing, diagrams, annotated sketches, templates and making a table.

Reporting to parents

Parents are given the opportunity to discuss their child's progress on two official occasions but understand that the school's 'open door' policy enables them to address concerns throughout the year.

Reports are completed before the end of the summer term. Teachers use the information gathered from their assessments to help them comment on individual children's progress.

Role of the subject leader

- Ensure that the subject is regularly discussed, reviewed and monitored within the school.
- Keep resources up-to-date and relevant, particularly in preparation for each unit of work.
- Promote design and technology good practice through the school.
- Set a good example of design and technology practice.
- Support long term planning for the whole school.
- Monitor and evaluate design technology through the school.
- Liaise with other primary and secondary schools.

Resource management

Funding for Design and Technology will be within the school budget plan for each financial year. There is a central Design and Technology budget to cover the purchase of equipment such as tools, construction kits, consumable materials, books and other resource materials. The Subject Lead will be responsible for ordering equipment and materials. It is the responsibility of each class teacher to identify additional resource needs in relation to their project. Equipment and materials have been organised in the specific cupboard. Any shortages, breakages or losses should be reported immediately to the Design and Technology subject leader.

Hygiene and Safety

It is important that children are taught essential life skills to enable them to participate confidently and safely in designing and making in society. Teachers have a duty to introduce children to a wide variety of production processes and the correct tools for the task. Children must design considering health and safety issues and consequences and operate in a safe and hygienic manner when designing. The subject lead, if required, supports teachers to teach the skills necessary ensuring that children can design and make safely.