

Jesus is the centre of our lives, Our learning and friendships, In a safe, happy and caring community, Where all are welcome.

HOLY CROSS CATHOLIC PRIMARY ACADEMY

DESIGN TECHNOLOGY POLICY FEBRUARY 2021

REVIEW FEBRUARY 2023

INTENT

It is our intent at Holy Cross Catholic Primary Academy to provide children with a high-quality education in Design and Technology. We encourage children to use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. We aim to, wherever possible, link work to other disciplines such as mathematics, science, computing and art.

The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness whilst being encouraged to become innovators and risk-takers. As part of their work with food, children will be taught how to cook and apply the principles of nutrition and healthy eating. Learning how to cook is a crucial life skill that enables children to feed themselves and others affordably and well, now and in later life.

IMPLEMENTATION

Design and Technology ensures children learn through a variety of creative and practical activities. We believe knowledge, understanding and skills are needed to engage children in a process of designing and making.

In Key Stage 1:

• Designing purposeful, functional, appealing products for themselves and other users based on design criteria.

• Developing, modelling and communicating their ideas through talking and drawing.

• Selecting from and using a range of tools and equipment to perform practical tasks.

• Exploring and evaluating a range of existing products.

• Building structures, exploring how they can be made stronger, stiffer and more stable.

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

In Key Stage 2:

• Using research to develop design criteria, which informs design ideas.

• Generating, developing, modelling and communicating their ideas through discussion, annotated sketches and diagrams.

• Using a wider range of tools and equipment to perform practical tasks.

• Selecting from and using a wider range of materials and components, including construction materials.

• Investigating and analysing a range of existing products.

• Evaluating their ideas and products against their own design criteria and considering the views of others to improve their work.

- Applying their understanding of how to strengthen, stiffen and reinforce structures.
- Understanding and using mechanical systems in their products.
- Understanding and using electrical systems in their products.

IMPACT

As designers, children will develop skills and attributes they can use beyond school and into adulthood.

Children, through Design Technology, will develop creativeness and technical and practical expertise, which enables them to perform everyday tasks confidently.

Children will be able to solve real life problems and to consider alternative materials specific to a particular audience.

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.

Design and technology education will make an essential contribution to the creativity of the children.

'Children should be taught to develop their design and technology capability through combining their designing and making skills with knowledge and understanding, in order to design and make products'

Design and Technology involves applying knowledge and skills when designing and making products. The activities undertaken will enable our children to consider the needs of individuals and society within a caring community. Undertaking design and technology activities in school will give our children opportunities to use a range of materials and processes, and to work independently or as part of a team. The aim is that the activities undertaken here in Holy Cross Academy will also reflect the children's local environment and support them in the wider world.

Purpose of study

Our work reflects the National Curriculum requirements for Design and Technology:

Through creativity and innovation, design and technology continues to shape our lives. Through a variety of creative and practical activities, children are taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. Using an activity focused approach, we design, make and evaluate, building on our technical knowledge. Children are taught the technical skills and craftsmanship to execute practical tasks, thereby developing confidence in using these skills.

Approach to D&T (planning and organisation)

Design and technology is taught in KS1 and KS2 as an integral part of topic work on a termly basis. Focused practical tasks are planned by the class teacher to develop and practise particular skills relevant to the child's age and stage of development.

All topics follow the same learning sequence of design, make and evaluate. This is evident in classes planning.

Included within Design and Technology is a comprehensive cooking curriculum, focusing on age-related key skills. Children will have opportunities to cook three times a year. Voluntary contributions are requested to support this experience.

We consider:

- 1. Design and technology opportunities arising within the curriculum and how they can link with other subject areas and bodies of knowledge
- 2. How we present the teaching of new skills to the children, i.e. group based, class taught or at an individual level
- 3. The role of design and technology in the teaching and learning process throughout the curriculum
- 4. How to encourage children to produce work of quality
- 5. How to encourage the safe, economic and appropriate use of materials, tools and equipment

It is important that the tasks presented to children help them make progress in D & T. The sequence of tasks and assignments should be planned so that there is progression in what is taught, as identified in the D&T long term plan. The school, through discussion and prior experience, has arranged D&T skills, concepts and techniques into curriculum maps. These skills, concepts and techniques into the planning and be incorporated into the lessons enabling progression to take place over both key stages.

Equal Opportunities

The full range of activities in technology will be made available to all children, irrespective of race, gender or physical disabilities

<u>Assessment</u>

Teacher assessment is used to inform future planning and to review each child's capability. Formative and summative assessment is completed based on the application of key skills throughout each unit of work for both key stage 1 and 2. Children are encouraged to evaluate in their book.

Where appropriate children will use their exercise books to plan, record, assess and evaluate their work.

Resources

Our school has a range of resources and the subject team is responsible for replenishing these. All staff have a responsibility to ensure it is maintained in good order.

Additional Needs

Any children who are identified as having additional needs are given the help they require and are encouraged to participate. A range of approaches will be used and incorporated into our D&T activities that will allow all children to develop their potential according to age and ability. Please refer to our school's policy on Inclusion for further information.

Role of the Subject Leader Team

The subject team works with the whole staff to develop a cohesive design and technology experience throughout the school. The subject team will:

- Support colleagues in their development and understanding of detailed work plans and implementation of schemes of work and in assessment and record keeping
- Take responsibility for the purchase and organisation of resources for D&T
- Keep up to date with developments in D&T
- Monitor delivery throughout the school through planning and work scrutiny, lesson observations, climate walks and pupil voice
- Collect each class's assessment data and report on this to Senior Management and Governors. Through this the subject team are able to monitor progress made in each class and identify any gaps in teaching and learning

<u>Planning</u>

Children will work through activities that follow our designed curriculum, outlined in our long-term plan. This plan will ensure that all aspects of D&T are covered during KS1 and KS2.

Monitoring and Review

The effectiveness of this policy will be monitored and evaluated by the Headteacher and DT subject team.