



Co-headteachers: Kerrie L Clowes MA BA (Hons) PGCE NPQH/ Emma E Doyle BA (Hons) PGCE NPQH

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Design and Technology Policy

October '25

Review date: October '26



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Our pledge is for every member of our school family to 'gain a heart of wisdom' every day. We aim to live wisely as we **Amaze** with our knowledge, zest for learning and kindness to ourselves and others. We aim to live well as we **Achieve** our full potential in a happy, caring and fully inclusive environment based on the core values of Christianity. We use our wisdom and hearts to **Aspire** to reach great heights as we take flight on our individual journey of endless possibilities.

'Gain a heart of wisdom' Psalm 90 v 12

Amaze. Achieve. Aspire

*In Design and Technology (DT), we enable children to '**gain a heart of wisdom**' by encouraging thoughtful problem-solving, purposeful creativity and practical understanding of the world around them. Through our DT curriculum, pupils Amaze with their innovative ideas, technical skills and zest for learning as they explore design, materials and mechanisms. As they Achieve through planning, making and evaluating, they grow in resilience and resourcefulness within a caring, inclusive environment shaped by Christian values. We Aspire for every child to use their wisdom to design with empathy, think sustainably and create solutions that serve others—so they may take flight on their journey of endless possibilities, equipped with the insight, kindness and courage to shape a better future through design.*



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Aims and objectives

At Harworth Church of England Academy our Design and Technology curriculum provides opportunities for the children to develop creative, technical and practical experiences for an increasingly technological world. Children build and apply a repertoire of knowledge, understanding and skills to design and make high-quality products. This includes to understand and apply the principles of nutrition and learn how to cook. To provide opportunity for children to critique, evaluate and test their ideas and products and the work of others.

Curriculum

KS1:

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].

When designing and making, pupils should be taught to:

Design

- 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



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- 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.

KS2:

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

When designing and making, pupils should be 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 and exploded diagrams, prototypes, pattern pieces and computer-aided design

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



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- 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]
- apply their understanding of computing to program, monitor and control their products.

Cooking and nutrition

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Pupils should 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.

Design and Technology – Planning and Assessment.

In Early Years Foundation Stage, children DT is a key part of the 'Expressive Arts and Design' area of the EYFS Curriculum. Within the provision at Harworth C of E Academy, the children in EYFS will have opportunities to explore the making of products using a wide



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variety of materials. They will cut, stick, draw and paint. The chance to practise their cutting skills is permanently on offer. The children will be encouraged to develop their use of a range of small tools, including scissors, paintbrushes and cutlery. The children will also be provided with opportunities to prepare food, including the cooking of food.

Design and Technology scheme that ensures and progression of skills and covers all aspects of the Design and Technology curriculum.. All classes have a scheduled Design and Technology lessons each week/term. Topics are selected throughout the year to ensure that children can amaze with their knowledge by making connections to other subjects/themes. Children's learning is stored in Design and Technology folders and pictures of their work will be stored on Seesaw for reference and assessment. We want to ensure that Design and Technology is embedded in our whole school curriculum and that opportunities for enhancing learning by using design and technology are always taken.

The subject is assessed using FFT on a termly basis. This shows whether or not the children are making acceptable progress throughout each half term or throughout the year. The teacher assesses against the skills ladder to state whether objectives have been met. The teacher also uses assessments/quizzes at the end of each unit of learning to further assess their learning, along with assessing any work that they have completed during the unit.

School website.

The URL of our school website is <http://www.harworthchurchofenglandacademy.co.uk>

The school website is used to provide accurate up to date information about our school, share what is happening in each class, share resources to enhance the children's learning and celebrate pupil's achievements in our school.

Monitoring and review.

The coordination of the computing curriculum is the responsibility of the coordinator Mr James Gray. His responsibilities include:

Supporting colleagues in their planning, teaching and assessment of the subject.

Reporting to the head teacher on the strengths and weaknesses of the subject.

Review evidence of the children's learning and work.

Update an action plan half termly.

Signed: James Gray. **Date:** 08.07.24



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