Avondale Primary School

Design and Technology Policy Statement

'Preparing our children for tomorrows world'
Introduction

Our curriculum has been organised and established in consultation with the subject leader and staff. It is continually developed through evaluation with and feedback from teaching and support staff.

DT is a subject within the National Curriculum 2014. This policy outlines the guiding principles by which this school will implement DT in relation to the teaching and learning of the National Curriculum 2014. It sets out a framework within which all staff can co-operate and gives guidance on planning, teaching and assessment.

This document is intended for all teaching staff with classroom responsibilities. It is also intended for Governors, parents, inspection teams, Local Authority Advisory/Improvement Officers and copies are available upon request from the school office and on the school's website

It is the role of the Headteacher and D&T Subject Leader to ensure that the policy is successfully implemented.

Intention of the Design and Technology Curriculum.

Design and Technology is an inspiring, rigorous and practical subject. Design and Technology encourages children to become independent, innovative and reflective learners. At Avondale, we offer experiences for children to use their creativity, to design and make purposeful products and systems that solve relevant and real-life problems. As we teach Design and Technology through an iterative and innovative process, the children are constantly encouraged to evaluate and reflect upon their work, ensuring they are thinking critically.

It is paramount that children acquire the knowledge and skills needed to prepare them for our increasingly complex technological world and future developments. Children are encouraged to creatively problem solve as individuals, as part of a team and during teacher led activities, with the outlook that this has the potential for children to make positive changes to their quality of life and can face challenges with a positive mind set. Children will learn how to use a range of tools and equipment safely and correctly.

Personal and social skills are taught and applied throughout. Children have many opportunities to recognise and value their own and other people's creativity. 'High-quality Design and Technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.'

Our bespoke Design and Technology curriculum allows children to research and reflect on present and past Design Technology, its uses and impact. Children should be aware that there are many processes behind products that we use today. Where possible, we aim to link our work to a range of subjects such as maths, English, art, history, science, computing. This ensures that contextual learning is taking place and is memorable for our children. Children are also taught about key individuals, inventions and events in that impact our world.

The bespoke Design and Technology curriculum recognises how design decisions can impact the wider world in terms of community, social and environmental issues.

The national curriculum for Design and Technology aims 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 prepare simple healthy meals.

 build on their vocabulary and apply this accurately.

Implementation of the Design and Technology curriculum

We incorporate Design and Technology in a variety of ways in the Early Years.

Children are provided with many ongoing activities and opportunities.

All elements of Design and Technology are covered over the course of six years. These are covered at different levels in accordance to the children's understanding.

Each year group has three Design Technology projects throughout the year which are thematically linked. It is at the teacher's discretion as to whether the lessons are completed weekly or are blocked and covered during a 'DT week' for example.

The 6 domains in primary Design and Technology are:

- Structures
- Digital World/Programming Systems
- Electrical Systems
- Textiles
- Cooking and Nutrition
- Mechanisms

These are mapped out in the subject long-term plan, with a strong focus on the progression of knowledge and skills across each year group. National Curriculum objectives and the development of progressive skills and knowledge are prioritised when planning units, before making meaningful links to wider curriculum topics. For example, Year 6 pupils study Programming and Control to ensure key Design and Technology objectives are taught progressively and in depth.

A Cooking and Nutrition unit is taught in every year group, as it is vital that children develop an understanding of how to prepare healthy meals, alongside learning how to work safely and hygienically. Where possible and in a timely way, year groups focus on key individuals and events within Design and Technology, such as Percy Spencer. Learning about significant individuals like Percy Spencer also helps pupils develop an understanding of how technology evolves over time and encourages curiosity and aspiration within Design and Technology.

Design and Technology is taught as part of the wider topic curriculum and, where appropriate, units are linked to the overarching theme for the year group, such as *Marvellous Me* or *Bright Lights, Big City*.

It is taught by the class teacher who will follow the subject specific MTPs provided by the DT lead. *This ensures progression between year groups and ensures full coverage of the NC2014. Teachers are expected to adapt and modify the model plans to suit their children's interests, current events, their own teaching style, the use of any support staff and the resources available. We must ensure that any modification does not overlook any statutory requirements of NC2014.*

Health & Safety

All out of school activities will comply with the guidelines in the school Health and Safety policy. A risk assessment form will be completed by staff prior to any trips. This will identify any risks and procedures will be put into place to minimise these. Risk assessment for using certain tools are in place and updated yearly.

The contribution of Design and Technology to teaching in other curriculum areas

Design and Technology contributes to the teaching of English by actively promoting the skills of reading, writing, speaking and listening. They use organisational features to find texts and information. The children develop oral skills in Design Technology lessons through discussions and through recounting their observations of design tasks. They develop their writing skills through planning and evaluating their projects.

Design and Technology contributes to the teaching of Mathematics in a number of ways. They use standard units of length, mass and capacity, choose which ones are suitable for a task, and use them to make sensible estimates in everyday situations. They access scale and utilise a variety of problem-solving strategies.

Computing provides pupils with access to a wide variety of information, images, discussions and exemplars which inform all aspects of Design and Technology. Computing also allows for improved inclusion as less able children are able to access and record information more readily. Both key stages will use Computer Aided Design (CAD) when suitable.

Children are taught to investigate and combine visual and tactile qualities of materials and processes and to match these qualities to the purpose of the work. Aesthetic aspects of products are usually directly linked to Art. Pupils should be taught to compare everyday materials and objects on the basis of their material properties, including hardness, strength, flexibility and magnetic behaviour, and to relate these properties to everyday uses of the materials. They also learn about push and full, friction, including air resistance. In KS2 children progress to construct circuits, incorporating a battery or power supply and a range of switches, to make electrical devices work

SEN

At Avondale, all pupils, including those with SEND, are entitled to participate in Design and Technology activities as prescribed by the National Curriculum. High-quality adaptive teaching ensures that all learners can access and achieve within the D&T curriculum. A whole-school adaptive teaching document supports staff in providing high-quality teaching for all learners and informs classroom practice.

Provision at Avondale should include:

- extended time to develop knowledge and understanding
- teacher or TA support
- adaptive teaching strategies to meet individual needs
- adapted recording methods or alternative ways to present learning, including sentence stems
- additional aids or adapted equipment to enable access to practical activities, such as a range of needle sizes or pre-made templates.

Equal Opportunities.

It is the responsibility of all teachers to ensure that all pupils, irrespective of gender, ability and including gifted pupils, ethnicity and social circumstance, have access to the curriculum and make the greatest progress possible. Continuity and progression is facilitated by the structure and content of the Scheme of Work.

Inclusion

Avondale is committed to providing effective learning opportunities for all children. Our school aims to provide a Design and Technology curriculum which meets the specific needs of individuals and groups of children. This includes the three essential principles of: -

- Setting suitable learning challenges
- Responding to pupil's diverse learning needs

- Overcoming potential barriers to learning and assessment for individuals and groups of pupils
- Using classroom assistants (where available) to support the work of individual children or groups of children.

Resources

Our school has a wide range of resources to support the teaching of Design and Technology across the school. Classrooms have a range of basic resources, with the more specialised equipment, supplies and other resources being kept in the central area storeroom. Basic tools are housed in the Design and Technology cupboard. This room is accessible to children only under adult supervision. Use of recyclable materials is encouraged in order to save costs.
Specialist resources, such as craft knives, glue guns and junior hack saws, are risk assessed and safety procedures are shared with the children prior to their use.

Impact of the Design and Technology curriculum

Pupils should leave school equipped with a range of skills to enable them to succeed in secondary education and beyond. Children should also be innovative and resourceful members of our society, ensuring they are prepared for our increasingly technological world.

Assessment in Design and Technology is purposeful, manageable and closely aligned to the curriculum. It focuses on the key knowledge, skills and vocabulary that are explicitly taught within each unit of work. Assessment is used to support learning, inform teaching and recognise individual achievement. Teachers use ongoing formative assessment throughout lessons to monitor pupils' understanding, their ability to acquire and apply new skills, and their development as resilient and reflective learners.

This may include:

- questioning and discussion
- observation of practical skills
- pupil self-reflection and evaluation
- DT work recorded in books
- verbal feedback and whole-class feedback
- retrieval activities linked to prior learning
- bespoke success criteria to support written evaluations

Each lesson begins with opportunities to revisit prior learning and key vocabulary, supporting the development of long-term memory as units are carefully sequenced and progressive. Knowledge organisers are used throughout units to reinforce and support the retention of key learning. Teachers respond flexibly to learning, addressing misconceptions, modelling skills and consolidating understanding where necessary.

Assessment is directly linked to the unit enquiry question and intended learning outcomes. By the end of a unit, pupils should be able to demonstrate what they know, understand and can do through their practical work, final products, DT book work, and peer and self-evaluation. Purple Mash quizzes may also be used to assess knowledge retention and identify any gaps in understanding.

Teachers may also use hinge questions, quizzes, exit tickets to check understanding of key knowledge and vocabulary. Key learning for each Design and Technology unit is recorded on Insight, where teachers make a judgement on pupils' attainment and progress at the end of the unit. This enables teachers and subject leaders to track progress, identify gaps and inform future planning.

The subject lead collects evidence through photographs, videos and examples of pupil evaluations using Canva. Pupil voice may also be gathered to support monitoring and subject development. At the end of the year, attainment in Design and Technology is reported to parents, and this information is passed on to the next class teacher to ensure continuity and progression.

Monitoring and Evaluation

Monitoring of the standards of teaching and learning in D&T is the responsibility of the subject leader in consultation with the head teacher. Planning, book scrutiny, pupil voice and lessons will be monitored as part of the Whole School Monitoring and Evaluation policy on a rolling programme. Key strengths will be identified along with issues for development. Any additional actions to be taken are noted on the D&T action plan for that school year. Subject leaders meet termly with the whole school curriculum lead to reported and discuss findings and feed-back at weekly staff meetings. The subject leader produces an Action Plan at the start of each year and an annual Subject Report for the SLT and Governors in the summer term.

The Role of the Subject Leader

The subject leader for DT is Aimee Robinson.

It is the role of the subject leader to:-

- Take the lead in policy development and the production of schemes of work designed to ensure progression and continuity in D&T throughout the school.
- Support colleagues in their development of detailed work plans and implementation of the scheme of work.
- monitor progress and attainment in D&T
- Take responsibility for the purchase and organisation of central resources for D&T.
- Keep up-to-date with developments in D&T education and disseminate relevant information to staff.
- Produces an Action Plan at the start of each academic year
- Produce a report to Governors at the end of each school year.

Their role is defined in detail in their subject leader job description and is linked to teacher appraisal.

Governors

The link governor for Design and Technology is Paul Curry. He has the responsibility of reviewing the subject action plan for the previous twelve months, agreeing the new subject development plan, ensuring that it is consistent with the whole school development plan as well as looks at specific subject development. As part of this report data will be shared with the subject governor to review the academic attainment of Design and Technology across school. A subject report will be provided to the identified governor in the Autumn term and the subject governor is required to provide challenge and ask questions regarding the subject report. Each year subject leads present to the governing body regarding strengths and areas for development within the identified subject area. This is so committees have a greater understanding about different subject areas and regarding the role of subject leadership.

Background Documentation

- This policy was informed by reference to National Curriculum documentation 2014.

Review

- This policy will be reviewed by the Headteacher and all the staff every two years and amendments presented to the Governing Body.

Date of last review: April 2026

Date of next review: April 2028