Haydn Primary and Nursery School

Design and Technology Policy 2026

Policy administration	
Policy writer:	Emily Green
Version number:	
Date of issue:	January 2026
Date of next review: (at least every two years)	January 2028

Design and Technology Policy 2026

National Curriculum

The National Curriculum states that: “Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils 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 acquire a broad range of subject knowledge and 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.”

Curriculum Intent

Design and technology at Haydn Primary School; building a better future! Our curriculum has been carefully designed to prepare children to take part in the development of tomorrow’s rapidly changing world. In a world which is so over-supplied in every sense, one of the ways to succeed and standout is to have a creative and lateral way of thinking about things. Our aim is for our pupils to become autonomous and creative problem solvers. We want to enable our pupils to identify needs and opportunities and to respond by developing ideas and eventually making producta. In short, we want our pupils to **think like a designer.** Through the study of design and technology, they will combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industrial practices. We understand the importance of allowing time to research existing products and evaluate its impact.

The aims of design and technology are to:

- Develop imaginative thinking in children, to enable them to talk about what they like and dislike when researching, designing and making.
- To nurture creativity, design and innovation and take creative risks, solving relevant real-life problems with open-ended outcomes.
- To develop skills in designing, planning, making, adapting and evaluating products for a particular purpose.
- Enable children to talk about how things work and to draw and model their ideas.
- To reflect on and evaluate present and past design and technology, its uses and effects.
- Encourage children to select appropriate tools and techniques for making a product, whilst following safe procedures.
- Explore attitudes towards the world and how we live and work within it.
- Develop an understanding of technological processes, products, their manufacture and their contribution to our society.
- To know where food comes from and to have a developing understanding of food preparation and nutrition.

Curriculum Planning

Design and technology is a foundation subject in the National Curriculum. We carry out the curriculum planning in design and technology in three phases.

Phase 1: Long-Term Planning
At Haydn Primary School, we refer to long-term planning as our 'Progression Map'. The Progression Map outlines A progression ladder was designed by the subject leader to ensure a clear progression of knowledge and skills that should be taught in each year group. The progression ladder enables teachers to see where the year groups' learning was focused last year and where it is heading next year.

Phase 2: Medium-Term Planning
Our medium-term plans give details of each unit of work for each term. They identify learning objectives referenced from the National Curriculum for each unit and ensure an appropriate balance and distribution of work across each academic year.

Phase 3: Short-Term Planning
At Haydn Primary School, teachers plan in a cross-curricular way so that they develop and adapt ideas to consider knowledge, skills and understanding to ensure continuity. The year group teachers create the short-term lesson plans for each design and technology session. These plans list the specific learning objectives and resources for each lesson. These are for the year group teachers' use but may be shared with colleagues, as necessary.

Foundation Stage

At Haydn Primary School, planning Design and Technology in Early Years focuses on child-led exploration, using everyday resources to develop skills in investigating, designing, making, and evaluating through play, stories, and sensory experiences, fostering problem-solving and creativity. Teachers provide daily access to materials such as blocks, junk modelling, and food. Planning links to stories, seasons and children's interests. Teachers carefully observe sparks of curiosity, providing stimulating materials in 'continuous provision', and extending learning through open-ended questions and documenting their ideas to build foundational skills.

The long-term and medium-term plans are drawn from the curriculum objectives outlined in the Early Learning Goals (ELG).

Short term planning identifies taught sessions, focussed activities and provision in the environment (weekly) for the goals identified.

Key Stage 1 and 2

Each year group has a 'Curriculum Overview'. This planning gives an outline of the design and technology topics that are taught in each year group and when these are taught alongside other areas of the National Curriculum.

Medium term planning provides an insight into the National Curriculum objectives taught each half term. This year group specific planning is reviewed annually by teachers in all year groups and the subject leader. The planning is designed to ensure relevant links are made for a cross curricular style of teaching. See

Short term design and technology planning is completed weekly alongside other subjects in the curriculum. This covers individual lessons that form a unit of work. Short term planning includes clear objectives taken or connected to the National Curriculum, the teaching sequence, differentiated activities, key questions and ICT opportunities and resourcing.

Curriculum Implementation

Teaching

Teachers ensure that the children apply their knowledge and understanding when developing ideas, planning, making products and evaluating them. We do this through a mixture of whole class teaching and individual/group activities. Within lessons we give children the opportunity to develop their ideas by working independently and in groups. They are exposed to a wide range of materials and resources, including ICT. It is important to teach children how to demonstrate excellent attitudes to learning and independent or collaborative working and carry out activities with safety and hygiene in mind. We feel this teaching supports our core values which are ready, resilient, resourceful, reflective and respectful and these are referred to and demonstrated by both staff and pupils.

Projects are designed and delivered considering 6 key areas:

- **User:** Pupils should have a clear idea of the user of their product, considering their values, needs, wants, interests and preferences.
- **Purpose:** Pupils should be able to communicate the purpose of the product they are designing and making.
- **Functionality:** Pupils should design and make products that work/function effectively to fulfil the purpose for the intended user.
- **Design Decisions:** Pupils should be provided with opportunities to make their own design decisions. This allows them to demonstrate their creative, technical, and practical expertise.
- **Innovation:** In the designing and making process, pupils need scope to be original with their thinking.
- **Authenticity:** Pupils should design and make products that are believable, real and meaningful to themselves and others.

Foundation Stage

We encourage the development of skills, knowledge and understanding that help Foundation Stage children to make sense of their world as an integral part of the school's work. In the Foundation Stage of the National Curriculum, we relate the development of the children's knowledge and understanding of the world to the objectives set out in the Early Learning Goals. These underpin the curriculum planning for children aged three to five.

Activities are well planned and purposeful, with a consistent focus on developing children's awareness of the world around them. The children's learning includes using a range of construction materials, exploration through dismantling different objects, questioning and discussion and choosing and using a range of different tools. These experiences encourage children to make connections between on area of learning and another and forms the foundations for later work in design and technology. We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking and discussion. These activities, indoors and outdoors, attract the children's interest and curiosity. Provision, where children have the opportunity to engage in self-initiated activities in order to develop their design and technology-based skills, curiosity and a widening vocabulary is planned weekly.

Key Stage 1

In Key Stage 1, design and technology teaching is taught through a topic-based approach, making as many meaningful cross-curricular links as possible. Projects are delivered in units which allows for more effective learning in which teachers can focus on high quality teaching and developing key skills. Children are encouraged to continually develop their ideas and techniques. We want our pupils to feel confident to generate, develop, model, and communicate their ideas through talking, drawing, templates, mock-ups and where appropriate, information and communication technology. Children are immersed in each topic, using specialist vocabulary, developing their enquiry skills and make learning purposeful and relevant to them.

Teachers deliver three design and technology projects per year. One of which, must be based around food and nutrition.

Key Stage 2

In Key Stage 2, design and technology is also taught through a topic-based approach with the aim to create meaningful cross curricular links. Teachers in Key Stage 2 also deliver at least two stand-alone units of design technology per year. In addition to these, teachers are expected to teach a project based on food and nutrition.

The main focus of design and technology teaching in Key Stage 2 is to build on pre-existing knowledge and skills. Pupils are expected to build upon their early childhood investigations to explore progressively how things work. Teachers encourage pupils to learn how products were designed and made to meet the needs of people who used them in the past, and how this happens now. We teach our pupils how to critically evaluate existing products and use their findings to inform/develop their ideas. We give children the opportunity within lessons to evaluate their own ideas and methods and work with others to say what they think and feel about them. At Haydn we want to provide our children with as many chances to use and secure increasing knowledge of which tools, equipment and materials to use and to build upon their previous experience and understanding of relevant scientific and mathematical concepts. Pupils will learn the working characteristics and properties of the materials they are using and why one material, ingredient or component is suitable for the purpose. As they progress through each key stage, pupils should respond ambitiously to an increasingly complex range of designing and making projects showing significant levels of originality and take creative risks to produce innovative ideas and prototypes.

The Environment

At Haydn, our classroom and corridor displays serve as a celebration of children's work, as well as an invaluable teaching aid and resource for encouraging independent learners. Displays feature and explain specialist vocabulary for each unit of work. The classroom as an environment for the teaching of design and technology celebrates children's creative learning through dedicated displays in each classroom that cover key topics. The displays provide children with the vocabulary needed for the current design and technology topic, and particularly in the Early Years, offers children independent access to equipment. This equipment and resources provide our pupils with opportunities to build and construct structures, use their senses to discover different materials and become exposed to a range of products. Wherever possible, teachers are encouraged to use the outdoor learning environments for the teaching of design and technology, with a dedicated 'garden' area for the planting and nurturing of fruit and vegetables. Children can use the outdoor space to investigate natural and man-made materials and design and create products for outside use.

Health and safety

The general teaching requirement for health and safety applies in this subject. During design and technology lessons we teach children how to follow proper procedures for food safety and hygiene. Pupils are expected to use equipment and materials safely and with care.

Teaching design and technology to children with special educational needs (including Gifted and Talented)

At our school we teach design and technology to all children, whatever their ability. Design and technology forms part of the school curriculum by providing a broad and balanced education to all children. Through our design and technology teaching we provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's different needs.

We are working to assess against the National Curriculum to allow us to consider each child's attainment and progress against expected levels.

When progress falls significantly outside the expected range, the child may have special educational needs. Our assessment process looks at a range of factors classroom organisation, teaching materials, teaching style, differentiation so that we can take some additional or different action to enable the child to learn more effectively. This ensures that our teaching is matched to the child's needs. Our work in design and technology considers the targets set in the children's EHCP (education healthcare plan), IPM (individual provision map) or PSP (pupil support plan). Appropriate adaptations are made e.g. Use of specific or specialist equipment. We enable pupils to have access to the full range of activities involved in learning design and technology. Where children are to participate in activities outside the classroom, for example, a museum or factory trip, we carry out a risk assessment prior to the activity to ensure that the activity is safe and appropriate for all pupils.

Contribution of design and technology to teaching in other curriculum areas

English

Design and technology contribute to the teaching of English in our school by providing valuable opportunities to ask and answer questions to develop their ideas and share viewpoints. During lessons, teachers are actively promoting the skills of thinking, reading, writing, speaking, and listening. Children develop their specialist vocabulary through hands, practical experiences and active discussion with their teachers. As in all areas of the curriculum at Haydn there are opportunities for children to develop their reading skills; children are exposed to a wide variety of non-fiction texts in design and technology and pupils in Key Stage 2 will undertake active research using the internet to look at existing products and gather ideas. Our pupils are encouraged to compare ideas, methods and approaches in their work and that of other children. The evaluation of products requires children to articulate their ideas and to compare their views with those of other people. Through discussion children learn to justify their own views and clarify their design ideas.

Mathematics

Design and technology contribute to the teaching of mathematics in several ways. There are many opportunities for children to apply mathematical knowledge and skills through the design and technology curriculum, using measurements, space and shape and using both two and three dimensions. This cross curricular learning can help pupils solve mathematical problems in the designing and building of functional products. Equally, working with construction elements requires a great deal of maths, from working out how much material is used to how many elements will fit in a certain space.

Computing

We use computing to support design and technology teaching when appropriate. Children use software to enhance their skills in designing and making and use ICT to collect or research information. Older children can collect visual information and research existing products. Teachers also encourage children to develop their ideas using iPad's and laptops to record their observations.

Science and Geography

Science and design and technology have a particular role to play in understanding many worldwide issues through the curriculum alongside geography and citizenship. Often working in a cross curricular way with these subjects is a good way to re-enforce learning, while taking a holistic approach. Pupils can learn about the environment, solar energy and sustainability and design specific products made for outdoor environments e.g. a water saving system.

History

Design and technology also contributes to the teaching of history in a cross curricular way. Projects will often link to historical topics where products are designed and made in response to past traditions or in connection to ancient civilizations, cultures and practices. Pupils learn about the history of design and technology where they investigate and evaluate products from the past and learn about how manufacturing has changed in the 21st Century.

Personal, social and health education (PSHE) and citizenship

Design and technology contribute to the teaching of personal, social and health education and citizenship. We encourage the children to develop a sense of responsibility in following safe procedures when making things. They also learn about health and healthy diets, where food comes from and how it is farmed with consideration of the environment. The chosen projects encourage children to be responsible and to set targets to meet deadlines. They also learn through their understanding of personal hygiene, how to prevent disease from spreading when working with food. Children are encouraged to discuss how they feel about theirs and others work and critically evaluate the process of designing and making their products. They are taught how to do this constructively and without hurting the feelings of others.

Spiritual, moral, social, and cultural development

The teaching of design and technology offers opportunities to support the social development of our children through the way we expect them to work with each other in lessons. Our groupings allow children to work together and give them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and co-operative work across a range of activities and experiences in design and technology, the children develop respect for the abilities of other children and a better understanding of themselves. They also develop a respect for the environment, for their own health and safety and for that of others. They develop their cultural awareness and understanding, and they learn to appreciate the value of differences and similarities. A variety of experiences teaches them to appreciate that all people are equally important and that the needs of individuals are not the same as the needs of groups.

Curriculum Impact

Our design and technology curriculum is skillfully designed to match the full range of pupils' needs and objectives set out in the National Curriculum. Our curriculum planning ensures that pupils have extensive opportunities to develop knowledge and understanding as well as practical skills in design and technology. We want our systematic links with other subjects to be highly productive in strengthening pupils' learning in design and technology and that projects are coherently planned in response to pupils' prior learning.

Through the curriculum planning and delivery of science at Haydn, we expect the vast majority of children to reach age related expectations or better by the end of each key stage. At the end of EYFS we expect the children to achieve the Early Learning Goal, achieving a 2 (expected) or 3 (exceeding) in the Understanding the world strand. By the end of Key Stage 1 we expect pupils to achieve age related

standards (secure) or better (mastery) in the strands taught in design and technology. We want our pupils to be demonstrating an interest and curiosity about the subject, to be able to talk confidently about their technological ideas and be able to evaluate their journey as they go along, using outcomes to inform their next steps.

By continuing to make the expected progress, by the end of Key Stage 2 we expect pupils to achieve age related standards (secure) or better (mastery) in all strands of the design and technology curriculum. The impact of our curriculum is measured by assessment of pupil attainment and progress, and through ongoing monitoring and reviewing of the subject through the role of the subject leader, as outlined below. We expect children to leave Haydn being able to work with increasing independence in developing their work and demonstrate resilience in solving design problems and technical challenges. It is important that our pupils develop excellent attitudes to learning, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs and the context for their work. We work towards our children holding a passion for the subject and that they keep up to date with new technological innovations in this rapidly changing world we live in.

Assessment and recording

Teachers assess children's work in design and technology by ongoing observations during lessons, through active questioning and regular marking of pupils' projects. They sometimes make notes of the progress that children make by assessing the children's work against the learning objectives for their lessons. At the end of a unit, each child is deemed to be either emerging, developing, secure or mastery for each of the objectives covered. This is based on their understanding and application of the content of the National Curriculum 2014 and this information is inputted into SIMs. At the end of the year, as part of the annual report, teachers inform parents on the progress their child has made and pass this information on to the next teacher. Progress and attainment are reported to parents through parents' evenings.

Resources

Our school has a range of resources to support the teaching of design and technology across the school. Classrooms have basic resources, with the more specialised equipment being kept in the resource cupboard. In Year 1, each child has an art, design and technology book to showcase their work. This allows children to draw and sketch their designs and prototypes and is carried through each year group up to Year 6.

Monitoring and review

The monitoring of the standards of children's work and of the quality of teaching in design and technology is the responsibility of the design and technology subject leader. The work of the subject leader also involves supporting colleagues in the teaching of design and technology, informing about current developments in the subject and what's on in and around Nottingham or courses and providing a strategic lead and direction for the subject in the school. The headteacher allocates leadership time to the design and technology leader so that s/he can review samples of children's work and undertake lesson observations of this teaching across the school. The subject leader builds a comprehensive portfolio of children's work across all key stages. This is evaluated thinking about typical progression in knowledge and skills. A termly report is written for the governor responsible for design and technology to keep them fully informed. This reports on recent development work, performance analysis, pupil outcomes in relation to development priorities, their impact on teaching and learning and any future developments. The governor meets with the subject leader to review progress termly and consider the report.

Signed: Emily Green

Date: 20.01.2026