



Carrington Infant School 'Together We Sparkle and Shine'

DT Policy 2024- 2025

Our Vision

"Together we Sparkle and Shine" is the vision for our school and this principle underpins all the work of the school.

We aim to create an outstanding, caring school community where everyone is valued and developed to their full potential as individuals, learners and as members of communities where they will play a part now and in their future lives.

Our Values

These are the following key values that underpin all the work of the school;

- Kindness
- Respect
- Honesty

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1. Introduction

At Carrington Infant School we believe that Design and Technology encourages our pupils to think creatively and solve problems. It enables them to think about products in the world around them and question how and why things work the way they do. Children learn the skills and knowledge needed to research, design, make and evaluate whilst building on knowledge and skills previously gained.

2. Subject Intent

Design and Technology allows our children to become creators and bring their own ideas to life. We encourage resilience through the evaluation and adaptation of our products. Solving real and relevant problems within a variety of contexts. Each design project builds a new layer of skills, bringing our children an exciting challenge and giving them the opportunity to be successful problem solvers. Design and Technology provides a wonderful opportunity for children to apply knowledge and skills linked to other subjects across the curriculum.

3. Aims and Outcomes

Children at Carrington Infant School will be given the opportunity to explore a wide range of tools and materials. They will learn to evaluate existing products and use this information to inform their own designs. They will work towards a given design criteria to create products which are appealing and fit for purpose. They will test and adapt their own creations, evaluating their own and others work within a supportive environment. They will build resilience, perseverance and the confidence to get things wrong, knowing that this is all part of the learning process. Our children will use the skills and understanding gained in their Design and Technology lessons to aid their learning throughout their time in school and beyond.

4. Teaching and Learning

Design and Technology lessons allow children to explore existing products and experiment with different ideas. Children will use this information to evaluate and adapt their designs where appropriate. By the end of KS1 children will be able to:

- Design products for others and themselves that are purposeful, functional and appealing
- Explore and evaluate a range of existing products
- Evaluate own ideas and designs against a given design criteria
- Explore and use simple mechanisms e.g. levers, sliders, wheels and axles
- Explore ways to stiffen, stabilise and strengthen. Use this knowledge to build structures
- Understand where food comes from
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Planning

Planning is a collaborative process and each class teacher plans with their year group partner. Progress across year groups is ensured through collaboration with the D&T coordinator. Teachers include specialist vocabulary and key knowledge in lesson content. We build on prior knowledge gained and enhance skills through practical experiences and approaches. Opportunities for learning outside the classroom, including the use of Forest School and educational visits are planned to enhance children's understanding of the wider relevance of D&T.

Progression

Target Tracker is used to record pupil's attainment and progress in D&T in line with the expectations laid out in the National Curriculum statements. The D&T progression document and assessment grid can be used to clarify progress.

5. Curriculum Overview

EYFS

'The development of children's artistic and cultural awareness supports their imagination and creativity. It is important that children have regular opportunities to engage with the arts, enabling them to explore and play with a wide range of media and materials. The quality and variety of what children see, hear and participate in is crucial for developing their understanding, self-expression, vocabulary and ability to communicate through the arts. The frequency, repetition and depth of their experiences are fundamental to their progress in interpreting and appreciating what they hear, respond to and observe'.

(Statutory Framework for the Early Years Foundation Stage, 2021)

Expressive Arts and Design

Creating with Materials ELG

Children at the expected level of development will:

- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form, and function
- Share their creations, explaining the process they have used
- Make use of props and materials when role playing characters in narratives and stories

(Statutory Framework for the Early Years Foundation Stage, 2021)

In accordance with the Early Years Foundation Stage Statutory Framework, children are given opportunities to and are encouraged to use DT skills independently during continuous provision. These early experiences include asking questions about how things work, investigating and using a variety of construction toys, materials, tools and products. Developing making skills and handling appropriate tools and construction materials safely with increasing control.

We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking, discussion and decision making. These activities take place both indoors and outdoors, and are designed to arouse the children's interest and curiosity.

KS1

'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.

(National Curriculum, Programmes of Study)

Design and Technology is a statutory subject within the National Curriculum. At Carrington Infant School we aim for our children to:

- Design products for others and themselves that are purposeful, functional and appealing
- Generate, develop, model and communicate ideas through talking, drawing, templates and ICT
- Model ideas by making mock-ups where appropriate using card and paper
- Evaluate own ideas and designs against given design criteria
- Explore and evaluate a range of existing products
- Explore and use simple mechanisms (levers, sliders, wheels and axles)
- Explore ways to stiffen, stabilise and strengthen. Use this knowledge to build structures
- Select from and use a wide range of tools and equipment to perform practical tasks (cut, shape, join and finish)
- Select from and use a wide range of materials and components according to their characteristics (construction, textiles and ingredients)
- Understand where food comes from
- Use basic principles of a healthy and varied diet to prepare dishes

At Carrington Infant School Design and Technology is taught within creative curriculum topics, allowing children to use the knowledge and skills gained from a wide range of other curriculum areas. This is achieved through practical activities in which children research, design and make good quality products based on a design criteria. Evaluation and adaptation is crucial in developing resilience and understanding. Each year we build on the skills and knowledge already gained.

On site Forest School sessions

Our forest school provides a unique opportunity for children to enhance their D&T knowledge and skills. Here they have the chance to apply this knowledge within an outdoor setting using a range of new materials and tools.

6. Cross Curricular Links

English – Design and Technology contributes to the teaching of Literacy by providing valuable opportunities to reinforce prior learning. Discussion through speaking and listening is an important way for the children to develop an understanding that people have different views about Design and Technology. The evaluation of products requires children to articulate their ideas and to compare and contrast their views with those of other people. Through discussion, children learn to justify their own views and clarify their design ideas.

Maths- During Design and Technology lessons, children learn to measure and use equipment correctly. They will learn about size and shape and make use of their mathematical knowledge in order to be creative and practical in their designs and modelling.

Science - Children will think about how they can create stable structures in design and technology. They will compare the suitability of everyday materials when thinking about their designs and build on their understanding of personal hygiene when preparing food. They will begin to think about where food comes from.

Computing – Where appropriate, computing can be used to enhance the teaching of Design and Technology. Children can use computing to collect information for research purposes and to also communicate their ideas.

Art – Children will create visually appealing representations of their ideas using drawings to aid the design process.

History and Geography – Children will evaluate past and present products to inform their own designs and ideas.

Personal Social Health Education (PSHE) - Design and technology contributes to the teaching of PSHE, encouraging children to follow safe procedures when making things. There is also the opportunity to learn about health through discussion about healthy diets when preparing and making food. All ideas are valued and welcomed. Children contribute to a supportive environment when evaluating their own and others work.

7. Assessment and Recording

Early Years Foundation Stage

Pupils' progress is constantly reviewed through ongoing observations of the children's work and pictures by referencing the statements in the children's learning journeys, both online through Tapestry and in the classroom journals. Children's next steps are identified and targeted through adult led activities.

Key Stage 1

Assessment is used to inform future planning and to provide information regarding individual needs. Assessment techniques will ensure that teachers assess the on-going design process and not just the finished products or outcomes.

These techniques should include:

- Teacher observations
- Discussion with children
- Teacher questioning
- Children's drawings, notes, mock ups and written work
- Self-evaluation made by the children themselves
- Taking photographs of children engaged in the design process

A PITA (point in time assessment) for a sample group of children who are tracked on Target Tracker using our skills/knowledge tracker. Any children working below age expected standards are noted and discussed at pupil progress meetings.

When reviewing the children's progress in Design and Technology, teachers must consider individual:

- Knowledge, skills and understanding
- Ability to develop, plan and communicate ideas
- Ability to evaluate and adapt designs
- Ability to work with tools, equipment, materials and components to make quality products
- Ability to work to a given criteria

8. Resources

The D&T Coordinator will be responsible for maintaining and organising resources. A bank of practical resources are kept in each classroom. Further resources relating to individual projects are kept in the Communication Hub.

Further support online can be found through the Design and Technology Association website.

Health and Safety

Health and safety within Design and Technology is hugely important, particularly when working with tools, equipment and other resources. Risk assessments are carried out by class teachers where appropriate. Children should be given suitable instruction on the operation of all equipment before being allowed to work with it. Children will be taught how to:

- Use tools and equipment correctly and sensibly
- Respect the equipment they are using and to keep it stored safely while not in use
- Recognise and consider hazards and risks

Food Hygiene

- Children and staff will take care to undertake appropriate hand washing and other hygiene related activities prior to and after preparing food
- Pupils working with food must wear aprons designated for cooking

9. Roles and Responsibilities

Children's progress will be monitored regularly and recorded on Target Tracker. Evidence of attainment will be recorded through photos, videos and written work. This will be used to inform future planning within the class and year group. Parents will be informed of their child's progress during parent consultation evenings and the end of year report.

10. Inclusion

In line with the school's inclusion policy, the D&T Coordinator and class teachers will work together with the SENDco / Inclusion Manager to ensure that all pupils have work planned to meet their specific needs. This may involve further differentiation, individual teaching from a teacher or learning support assistant and intervention groups. D&T lessons will be inclusive of all children. Where required, pupils will have work planned to meet their specific needs. Pupils will access this curriculum at the appropriate level, ensuring progress and differentiation. We support our SEND pupils by pre-teaching subject specific vocabulary and adapting work where appropriate. Methods of recording are adapted as required to support children with a range of needs.

Entitlement

All children are entitled to access a well taught D&T curriculum. It is accepted that factors such as gender, ethnicity, English as an additional language, disability, exceptional ability and social circumstance may affect a child's ability to learn. Various teaching strategies will therefore be employed to alleviate the impact of such factors. The implementation of this policy is the responsibility of all teaching staff.

11. Links to Other Policies

- Assessment
- Behaviour
- SEND

12. Monitoring and Review

The class teachers, D&T Coordinator and Head teacher will monitor the approaches detailed in this policy, in line with school policy and assessment procedures. Children's progress will be monitored and evaluated regularly, and evidence of attainment will be recorded, based upon teacher assessment against the criteria of the new National Curriculum. These evaluations will be used to inform future planning within the class and year group.