



Little Sutton C of E Primary School

DT Statement

Intent

At Little Sutton C of E Primary School, our Design Technology curriculum aims to inspire pupils to be innovative and creative thinkers who have an appreciation for the product design cycle through ideation, creation, and evaluation. We want pupils to develop the confidence to take risks, through drafting design concepts, modelling, and testing and to be reflective learners who evaluate their work and the work of others.

Through our scheme of work, we aim to build an awareness of the impact of design and technology on our lives and encourage pupils to become resourceful, enterprising citizens who will have the skills to contribute to future design advancements.

Our curriculum encourages:

- A strong focus on developing both design skills and knowledge.
- Critical thinking, with the ability to ask perceptive questions and explain and analyse evidence.
- The development of research and design skills across each year group.
- A deep interest and knowledge of pupils' locality and how it differs from other areas of the world.
- A growing understanding of design technological terms and vocabulary.

Our DT curriculum enables pupils to meet the end of key stage attainment targets in the National Curriculum. The aims also align with those in the National Curriculum.

Implementation

The Design and technology National Curriculum outlines the three main stages of the design process: design, build and evaluate. Each stage of the design process is underpinned by technical knowledge which encompasses the contextual, historical, and technical understanding required for each strand. Cooking and nutrition* has a separate section, with a focus on specific principles, skills and techniques in food, including where food comes from, diet and seasonality.

The National Curriculum organises the Design and technology attainment targets under five subheadings or strands:

- Design
- Build
- Evaluate
- Technical knowledge
- Cooking and nutrition*

Little Sutton's Design and technology scheme has a clear progression of skills and knowledge within these five strands across each year group. Our National Curriculum mapping shows which of our units cover each of the National Curriculum attainment targets as well as each of the five strands. Our Progression of skills shows the skills and knowledge that are taught within each year group and how these skills develop to ensure that attainment targets are securely met by the end of each key stage.

Through Little Sutton C of E's design and technology scheme, pupils respond to design briefs and scenarios that require consideration of the needs of others, developing their skills in six key areas:

- Mechanisms
- Structures
- Textiles
- Food
- Electrical systems (KS2)
- Digital world (KS2)

Each of our key areas follows the design process (design, build and evaluate) and has a particular theme and focus from the technical knowledge or cooking and nutrition section of the curriculum. The Little Sutton's scheme is a spiral curriculum, with key areas revisited again and again with increasing complexity, allowing pupils to revisit and build on their previous learning.

Lessons incorporate a range of teaching strategies from independent tasks, paired and group work including practical hands-on, computer-based and inventive tasks. This variety means that lessons are engaging and appeal to those with a variety of learning styles. Differentiated guidance is available for every lesson to ensure that lessons can be accessed by all pupils and opportunities to stretch pupils' learning are available when required. Knowledge organisers for each unit support pupils in building a foundation of factual knowledge by encouraging recall of key facts and vocabulary. Strong subject knowledge is vital for staff to be able to deliver a highly effective and robust design and technology curriculum.

Impact

Our enquiry-based approach to learning allows teachers to assess children against the National Curriculum expectations for DT. The impact of our curriculum is constantly monitored through both formative and summative assessment opportunities.

Each lesson includes guidance to support teachers in assessing pupils against the learning objectives. Furthermore, each unit has a unit quiz and knowledge catcher, which can be used at the start or end of the unit to assess children's understanding. Opportunities for children to present their findings using their evaluation skills will also form part of the assessment process in each unit.

At Little Sutton C of E, pupils leave school equipped with a range of skills and knowledge to enable them to study DT with confidence at Key stage 3. We hope to shape children into curious and inspired designers with respect and appreciation for the world around them.

The expected impact of following the Little Sutton's design and technology scheme of work is that children will:

- Understand the functional and aesthetic properties of a range of materials and resources.
- Understand how to use and combine tools to carry out different processes for shaping,

- decorating, and manufacturing products.
- Build and apply a repertoire of skills, knowledge and understanding to produce high quality, innovative outcomes, including models, prototypes, CAD, and products to fulfil the needs of users, clients, and scenarios.
- Understand and apply the principles of healthy eating, diets, and recipes, including key processes, food groups and cooking equipment.
- Have an appreciation for key individuals, inventions, and events in history and of today that impact our world.
- Recognise where our decisions can impact the wider world in terms of community, social and environmental issues.
- Self-evaluate and reflect on learning at different stages and identify areas to improve.
- Meet the end of key stage expectations outlined in the National Curriculum for design and technology.
- Meet the end of key stage expectations outlined in the National Curriculum for Computing

DT in Early Years Foundation Stage

In the EYFS, DT is encompassed by 'understanding of the world' and incorporates children understanding of 'People and Communities' and 'Understanding the World' whilst skills and curiosity in 'Technology' also benefit children's research and enquiry for DT.

From an early age, the children at Little Sutton Church of England Primary School develop small motor skills so that they can use a range of tools competently, safely and confidently. They will learn new technical vocabulary and understand and talk about the different factors that support their overall health and wellbeing: healthy eating. Furthermore, the children in early years will develop small motor skills so that they can use a range of tools competently, safely and confidently and articulate their ideas and thoughts in well-formed sentences; connect one idea or action to another using a range of connectives; use talk to help work out problems and organise thinking and activities and to explain how things work and why they might happen.

Pupil Voice

We value listening to the voice of our children to assess the knowledge and progress they have made. Children confidently talk through the process of designing, making and evaluating to achieve objectives and design criteria. Pupil voice is an important part of assessing, allowing teachers to continually reflect upon and improve the design and technology curriculum.

High-Quality Outcomes

Design processes are documented in design & technology books. Each project ends with all children creating a functional and usable product; these products demonstrate the skills they have learnt. Throughout the school, it is clear to see the progression of skills through the quality of products each year group creates.

Equal Opportunities and Inclusion

Through the school's REACH acronym, we are committed to providing a teaching environment which ensures all children are provided with the same learning opportunities regardless of social class, gender, culture, race, special educational need or disability. Teachers use a range of strategies to ensure inclusion and also to maintain a positive ethos where children demonstrate positive attitudes towards others. Support for specific individuals is well considered and planned for, with consideration given to how greater depth and further

challenge can be provided and demonstrated by children who require further challenge. All pupils are entitled to access the computing curriculum at a level appropriate to their needs.

To ensure inclusion, teachers use a range of strategies in line with the school's Inclusion Policy. Independent tasks, as well as teaching, are also well-adapted to ensure full accessibility and reasonable adjustments are made when needed, as well as to provide appropriate challenge to different group of learners. The school makes full use of additional adults who are deployed effectively to ensure that identified children are able to make progress in each curriculum area, according to their full potential.

Assessment

Assessment for learning is continuous throughout the planning, teaching and learning cycle.

Assessment is supported by use of the following strategies:

- observing children at work, individually, in pairs, in a group and in class during whole class;
- teaching using differentiated, open-ended questions that require children to explain and unpick their understanding of ideas and techniques;
- providing effective feedback in line with our school's marking and feedback policy;
- book moderation and learning walks, either whole school or key stage/year group specific, to evaluate the range and balance of work and to ensure that tasks meet the needs of different learners;
- data drops and pupil progress meetings take place at the end of each school term, and continuous assessment is carried out by class teachers and subject leaders throughout the school year.

British Values and Christian Distinctiveness

As a Church of England school, mutual respect is at the heart of our values. Children learn that their behaviours have an effect on their own rights and those of others.

All members of our school community treat each other with respect and follow our three school rules:

- Be kind
- Be safe
- Be respectful

Little Sutton pupils learn are taught to appreciate and celebrate diversity through the teaching of stories, values and celebrations from a variety of faiths and cultures.

Our curriculum underpins the five British Values:

- Democracy
- The Rule of Law
- Mutual Respect
- Tolerance for those of different faiths and beliefs
- Individual Liberty