Beech Hill School Design Technology (DT) Subject Policy



Written by: Megan Hampshire Date: September 2023 Review Date: September 2024

<u>Intent</u>

Design and Technology at Beech Hill School is taught purposefully in all year groups to allow children to safely develop their skills, work independently or in teams and become creative problem-solvers & makers. Our DT curriculum gives children the opportunity to design and make 'something' for 'somebody' for 'some purpose'.

Our DT Curriculum is designed to progressively develop skills so that children have a bank of techniques and knowledge enabling them to be good designers and technical makers of different products. Many aspects of DT offer an excellent opportunity to develop basic skills which will be useful as children prepare for ongoing life – for example cooking, measuring, sewing and the safe use of different tools.

Through our teaching of DT we aim to:

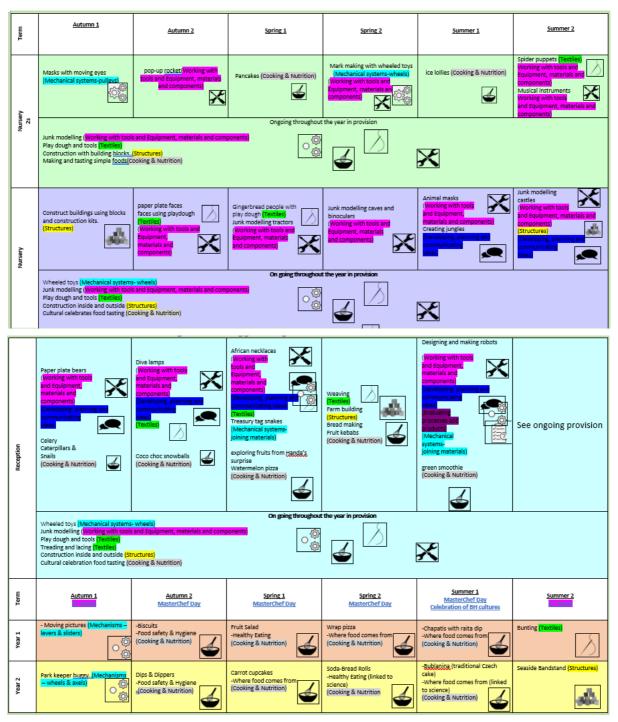
- Provide a broad, balanced and exciting Design Technology curriculum, which enables a response to a specific brief and creativity & imagination, as well as the development of skills
- Raise the standards of design technology education in school
- Have basic skills needed to complete DT projects, which are also useful as they go out into the wider world.
- Evaluate and critically analyse their own work and the work of others to decide on improvements.
- Enhance children's understanding and appreciation of different cultures through DT
- Provide high quality DT experiences and resources for our children
- Celebrate the DT achievements of each child
- Continue to develop the use of ICT and new technologies in creative work
- Allow children to realise that a career within the DT (STEM) subjects is achievable for them.

The DT National Curriculum is made up of different key components of design, technical knowledge & making, and evaluate. There is also the component of Cooking & Nutrition. Our DT curriculum within school enables us to cover all of these aspects.

Implementation:

<u>Planning</u>

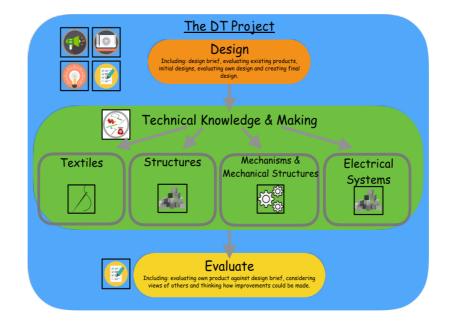
DT at Beech Hill school is planned and sequenced in a curriculum designed specifically for our children. The Long Term overview for DT throughout the whole school is as follows:



Year 3	Bridges (Structures)	Scone Based Pizza (building on year 1 wrap pizza) -Food safety & hygiene -{Cooking & Nutrition}	Easy-baked samosas with side salad -Healthy eating (Cooking & Nutrition)	Pasta and Vegetable Sauce Where food comes from (Cooking & Nutrition)	Mini Victoria sponges for a British Cream Tea -Seasonal foods (Cooking & Nutrition)	Money pouch (Textiles)
Year 4	Moving Brazilian scene (Mechanical systems – levers & linkages)	Tabbouleh - Healthy Eating (digestion linked to science) (Cooking & Nutrition)	Brazilian carrot cake (building on carrot cupcakes from year 2) -Food safety & hygiene (Cooking & Nutrition)	Seasonal Spring Salad with Bread Plaits (building on soda rolls year 2) - Seasonal foods (Cooking & Nutrition)	Baked Polish <u>Bigrophi</u> (dumplings) -Where food comes from (Cooking & Nutrition)	Light up Yorkshire landmark model <u>(Electrical systeme with</u> simple series circuit)
Year 5	Moving toy with cam mechanisms space themed (Mechanical systems – cams)	Frittatas -Seasonal foods (Cooking & Nutrition)	Chocolate brownies - Food safety & hygiene (Cooking & Nutrition)	Greek salad with flat breads (building on year 4 salad and bread plaits) -Healthy eating (Cooking & Nutrition) -	Bhajis/pakoras with pickle or chutney -Food safety and hygiene (Cooking & Nutrition)	T-shirts to wear on London trip Textiles)
Year 6	Shelters (air raid shelter) (Structures)	Crumble -Food safety & hygiene (Cooking & Nutrition).	Empanadas -Healthy eating (Cooking & Nutrition	Italian Pizza (building from y3 scone-based pizza) -Healthy eating - (Cooking & Nutrition)	Cream Tea (scones with cream and jam, sandwiches etc) -Food safety and hygiene (Cooking & Nutrition)	Moving fairground models (Mechanical systems – gears, pulleys system including electrical circuit)

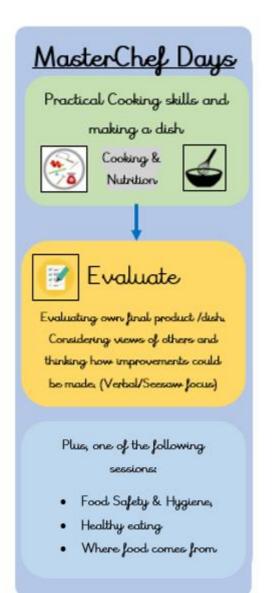
Teaching - DT Project Weeks

We teach design and technology during specific focus weeks twice a year linked to the national curriculum objectives and our progression of skills for individual year groups. Within our DT projects we set the scene with a design brief that is relevant and gives the children a purposeful context. Children are then given the opportunity to look at and evaluate existing products and designs, considering designs from the past, and deciding on how to improve them. Taking into account the design brief and aspects learnt from existing designs, children create their own initial designs, evaluate them and then pull ideas together for final designs. Within this, children may test different materials, create prototypes or use computer-aided software in their designs. Children are then taught a range of useful practical skills and apply these skills in making their final product as per their own designs. When the product is complete children with evaluate against the design brief, and also share with peers and people linked with the brief. (See image below for how this process flows through). Our work during DT week is evidenced on Seesaw with samples from going into the pink book which follows children through their journey at Beech Hill school.



Teaching - DT MasterChef Days

For the half terms without a DT week, we have a stand-alone 'MasterChef' day to cover the Cooking and Nutrition part of the Curriculum. This allows for development of practical skills and creating a dish; whilst also looking at Food Safety & Hygiene, Healthy eating, where food comes from and seasonal foods. Learning how to cook provides children with a crucial life skill and allows development of some of our core principles as a school, of independence and basic skills. (See image below for how the MasterChef days are sequenced). Photos of our practical skills, final product and work during other sessions in a MasterChef day are evidenced on Seesaw and in the year group pink book.



Resources used for DT

- National Curriculum
- Long Term and Medium Term plans written by DT lead
- Subject progression document
- Kitchen area for the children to use (fully equipped to enable coverage of skills progression)
- Equipment for technical DT saws, hammers, glue guns (fully equipped to enable coverage of skills progression)
- Seesaw
- A bank of books about diverse famous designers or specific areas of DT
- A collection of existing products in different design areas for children to consider.

Inclusion:

Each child will be given the same opportunities regardless of ethnic group, age, gender, ability, social circumstances of SEND in the development of their DT education. As a school we promote 'Teaching to the Top' learning, however lessons are differentiated as needed to extend children working at a higher ability, or to scaffold and aid those at a lower ability. Lessons and skills focuses can be adapted to suit the ability of children in specific classes, and can be differentiated by outcome or support. The skills progression document is paramount in ensuring that children's needs are met, and can be used to focus on skills relevant to specific children who may need support.

Monitoring

The subject leader is responsible for the monitoring of children's work, the quality of teaching & learning in DT, developing assessment and ensuring progression & continuity within the subject. This is carried out through a combination of deep dives with SLT, book-looks, monitoring of online Seesaw folders, learning walks & lesson visits, and pupil & teacher voice.

Additionally, the subject leader with support colleagues in their teaching, inform staff of developments in the subject and provide direction for DT across the school. The subject leader will ensure resources are up to date and available to be able to deliver the DT curriculum.

There will be at least one deep dive per year in DT, allowing the subject to be looked at in depth, including the children's work and lesson observations. Informal drop ins and support will take place throughout the year so that the DT lead can stay in touch with what's happening and support staff as needed.

Impact

Assessment and Feedback

EYFS

Videos, photographs and observations are kept of the children's work on Seesaw as evidence. Reception also have a pink floor book to evidence skills in preparation for year 1. Children's progress is tracked on the EYFS curriculum as 'Expressive Arts and Design' using Target Tracker. Assessment in this area of learning is used to highlight any gaps children may have in learning and put in place support to help children accomplish their next steps.

<u> Years 1 - 6</u>

Teaching staff will closely monitor the children's work during DT lessons. They will address misconceptions that may arrive in a timely manner through additional modelling or support. Teachers will discuss ideas/work/techniques/skills and question children to clarify or deepen children's understanding within DT.

Verbal feedback is key within DT. Teachers will provide opportunities to discuss children's work with them and question them to deepen their DT skills. Peer feedback is also built into lessons to allow children to appraise and evaluate each other's work. This feedback is captured on Seesaw or within the class DT books. As the DT books are a class snapshot of the development their ideas and work limited written feedback will be provided.

Target Tracker is used by all teachers to track individual pupil progress. This is completed over the year and allows teachers and the subject lead to highlight any gaps and plan for support, intervention or catch up in the next DT or cookery project. The teacher will then complete a full summative assessment at the end of the year to ensure their next year groups knows their starting points.