



-Subject Report 2022-2023

Subject	Design and Technology	Report prepared by	Ella Faul
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Overview of the year:

The focus this year has been to raise the profile and create opportunities to learn more DT based skills. We have also evolved and refined the curriculum and skills progression to ensure high quality teaching and learning takes place.

3 key messages of the year:

- Raise the profile of DT across the school and promote the subject with a whole school project
- Continue building rich resources to be used across the year groups.
- Promote the use of a key vocabulary document across all years and refine the skills progression document to ensure consistent, high quality teaching and learning.

Curriculum: Intent, implementation, Impact

Intent

At The Cambridge, we believe that Design and Technology is an integral part of a child's education and development. The intent for Design and Technology at The Cambridge Primary School is to provide pupils with exciting high quality lessons, which teach a range of skills and knowledge in the subject and relating topics. Design and Technology is an inspiring and practical subject. The curriculum is designed to encourage children to partake in curriculum-focused projects that teach the skills of designing, making and evaluating with the opportunities to bring their creative ideas to life, whilst learning about a range of designers.

'It's not just about ideas, it's about making ideas happen' - Scott Belsky

We intend for children to leave The Cambridge with memorable experiences that have underpinned their understanding and proficiency in designing, making, evaluating, technical knowledge and cooking as well as being able to reflect and think critically about their own work and the works of others. The progressive and engaging curriculum enables children to develop the required skills, knowledge and vocabulary needed for effective learning, leading them to using their skills in other subjects and make cross-curricular links through practical, hands on and real context activities such as health and safety, nutrition and cooking, technical knowledge, designing, making and evaluating.

In Design and Technology, A Cambridge Pupil will leave with:

Key Skills	Qualities
<ul style="list-style-type: none"> • Evaluate and analyse a range of designers, makers and their creative works using the language of design and technology. • To be proficient in a range of design and technology processes and techniques. • To design, make and evaluate effectively choosing appropriate materials, tools and techniques. • To think critically about their own work and the work of others. • To be able to reflect and communicate their ideas about their own work and the work of others. • To have a secure understanding of health and safety measures in each area of DT and be confident in demonstrating these. 	<p>A Cambridge pupil has a good understanding and knowledge of a range of designers, makers and different design and technology processes and techniques. Pupils are brave when trying new ideas and processes. Pupils are innovative in their designs and take ownership of their work, they are able to self-reflect and think critically about the products made. Pupils can work collaboratively and independently, they are confident in exploring design and technology.</p>

Implementation

To ensure high standards of teaching and learning in Design and Technology, we implement a curriculum that is progressive throughout the whole school. The teachers follow a progression of skills map, which highlights the skills that will be addressed within each term, topic and year group. Due to the nature of Design and Technology, it is often linked to other subjects and gives the pupils an opportunity to apply knowledge from other areas of the curriculum. Children use KAGAN within the lesson cycle and are encouraged to work collaboratively; discussing their ideas and working co-operatively to make their products and evaluate their own and others work.

Topics taught across each year group:

	AT1	AT2	SP1	SP2	SU1	SU2
EYFS	<i>Food tech</i>	<i>Sculpture</i>	<i>Junk Modelling</i>	<i>Puppets</i>	<i>Junk Modelling</i>	<i>Food Technology</i>
Y1		<i>Mechanisms</i>	<i>Junk Modelling / Designing & Making</i>		<i>Textiles</i>	
Y2	<i>Mechanisms</i>		<i>Woodwork / Junk Modelling</i>		<i>Textiles</i>	
Y3		<i>Textiles</i>		<i>(tbc)</i>		<i>Food Technology</i>
Y4		<i>Design & Food tech</i>		<i>Modelling</i>		<i>Woodwork</i>

Rationale for curriculum organisation:

Design and Technology within the EYFS is taught through inputs and learning through play with the fundamental skills being taught and practiced throughout the year. The children explore and use a variety of materials, tools and techniques through a combination of child initiated and adult directed activities. There is an expectation that a minimum of one hour per week of Design and Technology will be completed in a half term, Design and Technology is taught whole-class, KAGAN is used as part of the research element in the lesson cycle. To supplement the planning or 'dive deeper' into a specific skill hook days are used for mini projects and practice. Due to the thematic approach to our curriculum, skills and knowledge are interwoven into other subjects during the half term, further connecting and embedding the learning. The Design and Technology curriculum is progressive with skills being introduced and developed as the children move up the school, throughout their learning they work towards developing the Cambridge characteristics and qualities that a Cambridge pupil is expected to leave with, these BICO characteristics are linked to each lesson on the midterm plan.

What have you done to ensure that every skill is covered?

The subject leader reviews the planning and skills progression to ensure the correct skills are being taught within each year group and topic. The skills progression map is updated and reviewed as topics and cohorts change to ensure gaps are filled. Mid-term planning is created around the National Curriculum and skills progression by the subject lead, skills are highlighted on the mid-term plan and skills progression to show what has been taught. There is coverage check document to ensure skills are covered across each key stage. Knowledge organisers are in the process of being developed which will be linked to the skills progression document, these will show the links between the knowledge learnt and the skill being practiced.

Impact

Pupils progress in Design and Technology is seen using formative assessment. The use of verbal feedback, self-assessment, peer assessment and rag rating is used to assess the skills and knowledge being taught. Pupil voice is embedded into lessons with the use of KAGAN and discussion points. Pupils are aware of the skills being taught and encouraged to reflect on the use of the skill within each lesson. Going forward I would like to implement the use of a formative assessment sheet, which highlights the objective and teachers, can mark whether the child is achieving the objective each lesson or needs more support. This is a more formal way of formally assessing to record teachers' judgement and keep track of the skills and knowledge being achieved.

What does marking and assessment look like in your subject? How do you know this has been effective for children's progress?	What CPD have you received / research have you carried out in your subject area? What has been the impact of this on the children?
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Within Design and Technology assessment is carried out using verbal feedback and questioning, pupils are encouraged to reflect on their work in relation to the objective as the lesson cycle goes on. Assessment of the children's work is ongoing to check understanding and ensure that progress is being made. Practical lessons provide hands-on, kinaesthetic learning, ensuring concrete understanding. All lessons are recorded in DT Journals, some lessons (particularly design and evaluate lessons) are taught directly into their books, pictures are taken of the making process and put into the DT journals. In the Early Years Foundation Stage, pupils are assessed against the Early Years Framework, Development Matters and Birth to 5 using a platform called Tapestry. When learning through play and during inputs photos and videos are taken of the pupils 'wow moments', and given a comment to record children's learning. Home learning projects are used to promote DT at home and encourage children to practice the design and making process.

The subject leader created a mid-term plan, based on research, for the Year 4 Curriculum, revised, and reviewed previous plans in the other year groups. The skills progression and coverage documents have been reviewed and edited to reflect new topics. A vocabulary and language progression document is in the process of being completed which highlights the key vocabulary to be taught within each year group and examples of the language progression as the children move up the school. From staff monitoring I have found that teachers are not confident in Design and Technology teaching and I am researching into some good CPD opportunities for them to access. This will impact the children's learning positively as the curriculum improves, the more confident teachers feel the better the teaching and learning will be.

What Performance Information is monitored? What are the 3 questions are you considering for future developments?

Progression in DT is good; there have been some improvements since last year. Pupils are making adequate progress with the skills of Design and Technology and lessons are being taught weekly, focusing on developing a set of skills. Planning has been adapted and is now better suited to the topics chosen this year. Progress is seen through windscreens and observations in EYFS and DT Journals in KS1 and KS2.

How are Fundamental British Values, the Cambridge Learning Characteristics and personal development promoted within your subject?
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Fundamental British Values
Pupils are taught the British values across the curriculum. In DT pupils are taught about a range of designers from different cultures and backgrounds, they are taught about cultural architecture, demonstrating tolerance. Pupils are democratic in their thinking as they discuss a range of designers and take into account the views of others. Children will demonstrate rule of law as they undertake safe practices and follow criteria for each project. The pupils will have

<p>Monitoring in DT has taken place through</p> <ul style="list-style-type: none"> • Book looks • Reviewing and updating of Planning and progression documents. • Staff verbal check ins. • Staff Voice Survey <p>Lesson observations and pupil conferencing are part of the monitoring programme.</p> <p>For DT in the future I would like to consider the following key questions:</p> <ol style="list-style-type: none"> 1. What vocabulary are children learning within each topic and is the correct terminology being used? 2. Do teachers have the subject knowledge to teach and assess DT effectively as we move to upper KS2? 3. Are children excited about Design and Technology projects and are their skills being transferred to other areas of the curriculum? 	<p>opportunities to develop and demonstrate individual liberty as they make their own choices when producing work in Design and Technology. Pupils are encouraged and shown how to have mutual respect when commenting and discussing each other's work, when working in group projects and when giving reviews.</p> <p><u>The Cambridge Learning Characteristics (BICO)</u> All learning at The Cambridge is linked to our learning characteristics, these are written on our midterm plans and lesson slides and are discussed throughout each lesson. Pupils are given opportunities to work collaboratively and independently when exploring design and technology. Pupils are innovative in their designs and take ownership of their work, they are able to self-reflect and think critically about the products made. Pupils are encouraged to be brave with their ideas and when trying new skills.</p> <p><u>Opportunities for Personal Development</u> As part of our Career Clubs we have started a 'Creative Crafters' club which takes place after school and focuses on a range of Art and DT skills. We also run 'Little Chefs' on two days a week for Reception, KS1/KS2. This focuses on Food Technology and gives pupils the chance to cook and create a range of recipes from fruit kebabs to meatballs and pizzas.</p>
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What have we done in 2022?

Implementation	Impact
Resources	Resources purchased to restock the DT cupboard at the start of the year and to be shared across the school. Some resources were purchased throughout the year to be used with new midterm plans, these gave the pupils an opportunity to work on a new skill, practice previously learnt skills and provide opportunities for exploring their creativity.
Vocabulary and language progression document	This has been started and will be developed and finished in 2023. The document highlights the technical vocabulary and type of language children should be using across each year group. The vocabulary is specific to topics and shows a clear progression. Using more vocabulary in DT will improve children's technical knowledge and support Teachers with assessment.

What is the action plan for 2023?

Implementation	Impact
Whole School Project	To work along another foundation subject to create a whole school mural outside the school building.
Refine the Curriculum	By reviewing and refining the curriculum it will lead to more successful teaching and learning. We have planned different things this year and it is important to review their effectiveness and success. Topics may also change or need to be adapted to suit the next year, therefore, planning should be changed to suit this. Using Staff and Pupil feedback will support the refining of the curriculum.
To create a knowledge organiser for each year group.	These have been started this year, they are a tool used to layout the knowledge being taught within each year group, linked to each topic, skill and prior learning. This gives teachers a clear resource to use when planning and assessing and highlights the knowledge the children should be gaining in Art each year.
Replenish and Renew resources	By restocking the DT cupboards with shared resources this helps increase storage space in classrooms and provides a central shared area for every year to access. Purchasing resources linked directly to topics to ensure all skills can be covered effectively, this will make it much easier to deliver lessons and teach all required skills from the progression maps.