



Subject Report 2023-2024

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

This year the focus has been evolving and refining the curriculum by updating the skills progression maps, mid-term plans and creating key documents such as knowledge organisers to ensure that there is a strong curriculum and knowledge progression in place and that teachers feel secure in teaching the subject and children feel excited and passionate about their learning in Design and Technology.

3 key messages of the year:

- The creation, implementation and promotion of the use of knowledge organisers for each topic within each year group.
- Adaptations and refinement to current midterm plans and curriculum documents to ensure they are updated, relevant, creative and high quality.
- The continued development and purchasing of the resources needed to provide a strong DT curriculum.

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.	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.

Implementation

Design and Technology is taught as a skill-based curriculum from EYFS to Year 6 allowing opportunities for cross curricular learning. The subject lead plans the mid-term plans linked to the year groups focused topic. Design and Technology lessons are taught once a week for an hour across KS1 and KS2 with 'DT Afternoons' often used as part of hook days or themed weeks. Within EYFS the children are given daily opportunities to access DT elements through the indoor and outdoor continuous provision. Lessons follow a cycle, starting with a research-based lesson followed by skill specific lessons which are built on and practiced each week as part of a half - termly project. This cycle is implemented through the planning and teaching which provides opportunities for pupils to gain new knowledge, skills, practice, and focus on the design, make and evaluation process. DT journals are used to record newly learnt techniques, practice new skills, draft pieces of work and includes pictures of their final pieces. Pupil conferencing is carried out on an informal basis during monitoring sessions, by the subject leader to gauge pupils opinions about the teaching of DT and the content covered. DT journals are monitored on a termly basis by the Subject Leader to ensure curriculum coverage.

Topics taught across each year group:

	AT1	AT2	SP1	SP2	SU1	SU2
EYFS	Food Technology	Junk Modelling	Junk Modelling	Textiles	Junk Modelling	Food Technology
Y1		Mechanisms	Junk Modelling		Textiles	
Y2	Mechanisms		Woodwork		Textiles	
Y3		Textiles		Sculpture		Food Technology
Y4		Design & Food Technology		Modelling	Textiles	Woodwork
Y5	ROAR Project		Textiles			Food Technology

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. Throughout the rest of the school children take part in the minimum of one-hour lessons, taught whole-class. Lessons follow a cycle starting with a KAGAN focused research lesson, followed by skills specific lessons leading up to completing a half termly project, linked to learning across other subjects. To supplement the planning or 'dive deeper' into a specific skill hook days are used for mini projects and extra practice. Where possible, skills and knowledge are interwoven into other subjects during the half term, further connecting and embedding the learning as they work towards developing the key skills and qualities of the Cambridge Learning Characteristics.

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

To guarantee extensive coverage of every skill, the subject lead has examined and revised the skills progression document and planning as part of the ongoing monitoring process. By drawing upon my own expertise, conducting research, and checking the National Curriculum, I have consolidated all the skills and allocated them to the respective year groups. This process ensures that there is effective development and progression of skills as children move up through the years. Regular updates to the Mid-Term plans are made after each term, involving check-ins with teachers. The skills progression document serves as a guide, indicating when each skill is taught, and is subject to frequent reviews.

Impact

Teachers gauge children's progress in Design and Technology through formative assessment methods. This includes utilizing verbal feedback, conducting book looks, encouraging self-assessment, and peer assessment, employing teacher judgement, and implementing rag rating to assess the acquired skills and knowledge. Within each lesson, the specific skill being taught is highlighted by the teacher. The knowledge acquired is shown through knowledge organisers in the children's journals, prompting reflection and rag rating at the end of each lesson. Pupil's voice is generated in lessons, through KAGAN, children are encouraged to actively reflect, critique and provide feedback on themselves and others as they work through the 'design, make and evaluation cycle'. Continuous verbal feedback is provided by teachers during lessons, and children's work is pictured and presented in their DT Journals and displayed in class.

What does marking and assessment look like in your subject? How do you know this has been effective for children's progress?

In Design and Technology, assessment is conducted through verbal feedback and questioning, fostering an environment where pupils actively reflect on their work in relation to the lesson objectives as the cycle progresses. Ongoing assessment of children's work ensures a continuous check on understanding and monitors progress. The knowledge and skill organisers provide a clear expectation of what children should be able to know and do at the end of a unit. Practical lessons, designed for hands-on and kinaesthetic learning, contribute to a concrete understanding of the knowledge and skills. All lessons are recorded in DT Journals, and for certain lessons, especially those focused on design and evaluation, content is directly incorporated into students' books. The making process is documented through pictures, which are then included in the DT journals. In the Early Years Foundation Stage, pupils' assessment aligns with the Early Years Framework,

What CPD have you received / research have you carried out in your subject area? What has been the impact of this on the children?

The subject lead has researched upper KS2 curriculums to gain more knowledge and ideas about purposeful and exciting projects that could be implemented into our own curriculum and that matches the skills progression document. CPD training has been completed on National College which have focused on building a KS2 curriculum and leading Art and Design effectively. The subject lead has reviewed all curriculum documents following this to ensure they are the most accurate and up to date.

<p>Development Matters and and Birth to 5. During play and instructional inputs, photos and videos capture pupils' "wow moments," to further promote Design and Technology at home, home learning projects are assigned, encouraging children to practice the design and making process beyond the classroom.</p>	
<p>What Performance Information is monitored? What are the 3 questions are you considering for future developments?</p>	<p>How are Fundamental British Values, the Cambridge Learning Characteristics and personal development promoted within your subject?</p>
<p>Progress in DT is good, with children advancing in both knowledge and skills each year. Notable improvements have been made through the revision and updating of mid-term plans and curriculum documents, complemented by the introduction of knowledge organisers. These enhancements are ensuring higher quality teaching and learning, leading to increased confidence among teachers. The progress of children is evident through their DT Journals in Key Stages 1 and 2 and has been seen through monitoring.</p> <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 • Pupil conferencing • Learning Walks <p>For Design and Technology in the future, I would like to consider the following key questions:</p> <p>Key Questions:</p> <ul style="list-style-type: none"> • Are teachers confident in assessing the children's knowledge and skills in Design and Technology? • Are children using the taught vocabulary within lessons to discuss their learning? • Are children with additional needs accessing lessons and achieving in Design and Technology? 	<p><u>Fundamental British Values</u></p> <p>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 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></p> <p>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></p> <p>As part of career clubs, we run 'Little Chefs' after school each week, targeting different ages across the year. This club is linked to Food Technology and gives pupils the chance to cook and create a range of recipes from fruit kebabs to cakes and pizzas.</p>
<p>What have we done in 2023?</p>	
<p>Implementation</p>	<p>Impact</p>
<p>Refine the current Mid Term Plans</p>	<p>Reviewing and refining the curriculum is essential to ensure the delivery of high-quality teaching and learning. It is important to reflect and review on the adjustments made in planning this year and evaluate their effectiveness and success.</p>
<p>Year 5 Curriculum</p>	<p>As a subject lead I started putting together the Year 5 curriculum and thinking about the skills and knowledge that would need to be covered. I spoke to the Year 5 team to gain an understanding of their topics and generated ideas.</p>
<p>Updated Skills Progression Documents</p>	<p>I have examined and revised the skills progression document and planning as part of the ongoing monitoring process. By drawing upon my own expertise, conducting research, and checking the National Curriculum, I have consolidated all the skills and allocated them to the respective year groups to fit with the new topics introduced.</p>

Replenished and Renewed resources	We purchased 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
What is the action plan for 2024?	
Implementation	Impact
To complete knowledge organisers for each year group and term.	These are a tool used to layout the knowledge being taught within each year group, linked to each topic, skill and prior learning. The organisers give teachers a clear resource to use when planning and assessing and highlights the knowledge the children should be gaining in Art each year. They are a brilliant tool for children to use to rag rate themselves against the knowledge being taught. Giving them responsibility over their learning.
To create a formative assessment sheet linked to each topic.	This will improve the accuracy of teacher assessment and provide teachers with a concrete source of assessment for Art and Design. It will also benefit the subject lead to see an overview of each classes progress, this will help when reviewing the curriculum.
Make links with local secondary schools	To liaise with local schools to share /acquire knowledge of any opportunities, visits or potential guests to further inspire the children and expose them to art outside of their current setting.
Year 5 & 6 Curriculum	The process of refining the Year 5 curriculum and soliciting feedback from the team helps maintain a consistent and high-quality approach to teaching and learning. This effort guarantees the effective coverage of all essential skills. Beginning the Year 6 curriculum early ensures that lessons and MTPS are well-prepared, and necessary resources are ordered in advance. This proactive approach not only facilitates a smooth transition but also alleviates the workload for Year 6 teachers in the future.
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. We will also need to buy new bigger, longer lasting resources such as safety goggles and tools to supplement the Year 6 curriculum. Within upper KS2 pupils move on to bigger projects involving resources such as cams, pulleys, woodwork, saws, textiles, circuits and food technology. These projects give them a better idea of Design and Technology in secondary school and will equip them with some basic skills. As these projects are only carried out in upper KS2 it is important that the right resources are purchased for each project.