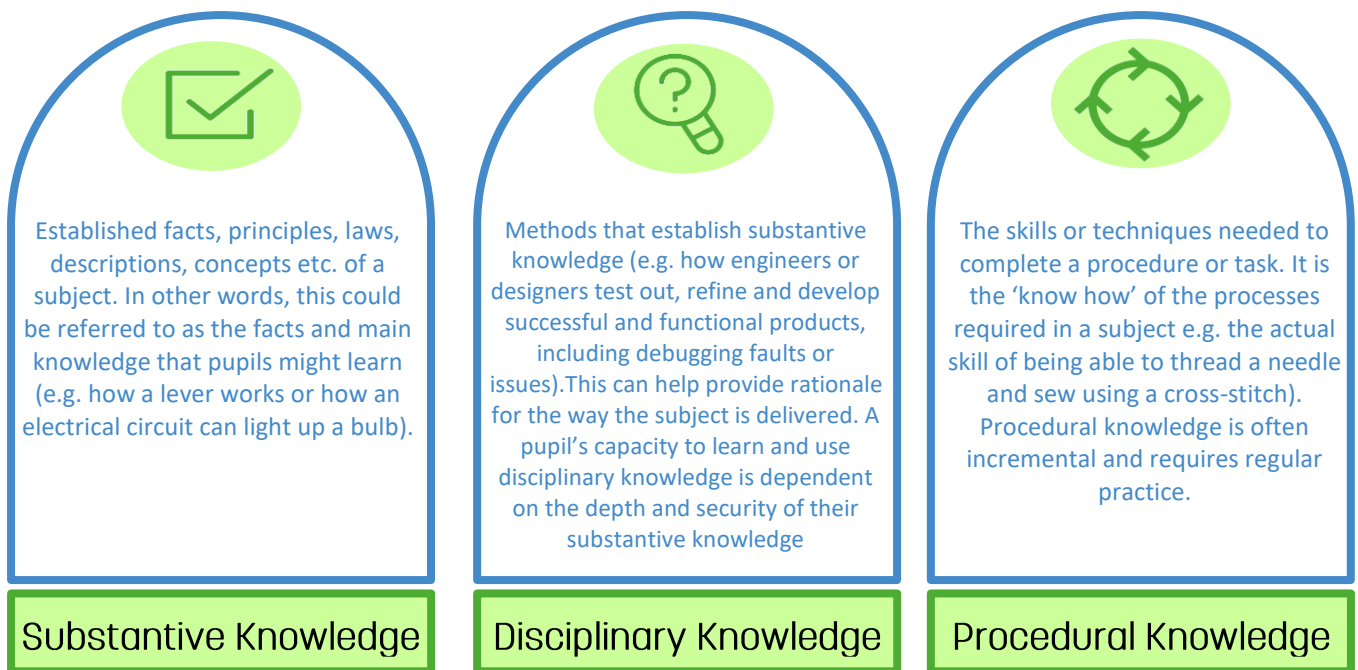


Principles of Teaching and Learning

At The Coombes CE Primary School, we ensure that our curriculum design places rich subject-specific knowledge at the heart of all learning. When planning our curriculum, we recognise that there are different types of knowledge that contribute to effective learning and the distribution and intersection of these differs between each subject.

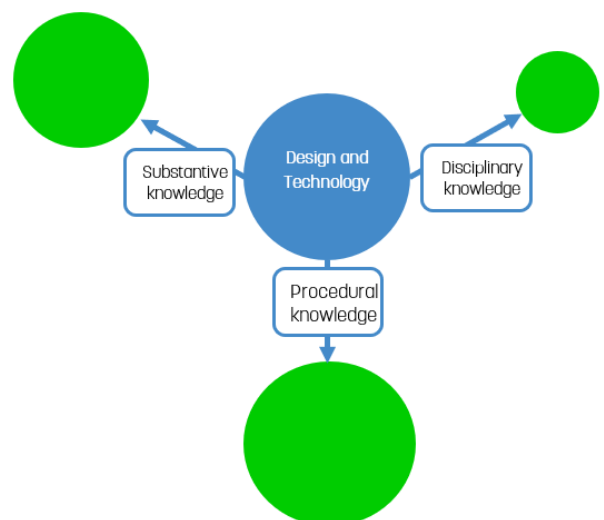
The pedagogical subject-specific approach to teaching and learning considers each knowledge type and is therefore essential in both planning and delivery, ensuring children make connections with prior learning within and across subjects, creating deeper learning experiences. Using this approach to our curriculum ensures children at The Coombes are able to confidently recall, use and apply knowledge across all subject areas, whilst also developing a love of learning and to grow and flourish in all stages of their education in our school.

The three types of knowledge



Knowledge distribution

We recognise that different subjects have different weightings of substantive, disciplinary and procedural knowledge. This infographic highlights what we consider to be the ratio of each form of knowledge within this subject:



Our Design Technology Vision

Design and Technology at The Coombes Church of England Primary School provides pupils with the opportunity to participate in a range of different activities where they develop a variety of practical skills. Our vision for Design and Technology is for pupils to develop the theory and practical skills necessary to build strong foundations for success in the future as critical thinkers, developers, designers and makers. By learning core skills in researching others' work, designing their own products, learning the skills to create these products and evaluating the success of their work, pupils will embed core skills that will help them not just in Design and Technology, but across their academic and working lives and will enable them to contribute positively and effectively to society by understanding problems and proposing solutions. At all stages, there is an emphasis on linking Design and Technology with other subjects, where possible and appropriate. Design and Technology is taught as a discrete subject.

Curriculum structure

Design and Technology lessons are taught using blocking, to allow adequate time for pupils to effectively explore and test the skills and theories behind the design and creation of products. This approach ensures that the three topics are taught in each year group to ensure that pupils are taught a range of knowledge and skills and is purposeful for future life. We encourage children to use the evaluation process as a time of reflection considering both the positive and negative elements of their project and using this to improve their future projects. Children will complete a Cooking and Nutrition topic in each year group to build up practical skills which will take them into adulthood. media.

Each subject has concepts which run through every unit and year group. These concepts allow certain Art & Design units to experience and develop control of different materials and media, while others may focus upon recreating art in the style of others. This ensures that some units focus upon material and media while in others, a specific end product demonstrates progression in application and form from unit to unit and year to year

Setting a project title. Designing and making: Something for Somebody for Some purpose.	Appraisal and Knowledge of Others' Work	Learning a key skill
Developing Ideas and Planning	Making and Producing	Evaluating

In Design Technology, our concepts are as follows:

We plan and sequence units based on the National Curriculum objectives which cover three main topic areas: Processes in Mechanisms and Structures, Cooking & Nutrition and additionally in Key Stage Two- Textiles. Throughout these units, pupils will be provided opportunities to test out their ideas and consider their effectiveness whilst building the foundations of high-quality vocabulary to articulate their reflections in a meaningful manner. Pupils also learn to evaluate products against a set of criteria and use this throughout the evaluation stage of their own project.

To complement the curriculum, there are visiting workshops, themed class events and educational visits, which enhance pupils' understanding and provide varied learning experiences.

Key Stage 2

Early Years Foundation Stage

In Early Years Foundation Stage (EYFS), our Reception pupils learn about how to formulate an idea to create something, and are supported to plan out and execute their idea. Using questioning, pupils refine and evaluate their product. Pupils are given the opportunity to develop their fine motor skills and increase dexterity with a range of Design and Technology tools, including scissors and cutlery.

Key Stage 1

In Key Stage 1 (KS1), pupils will go through the whole plan, do and review process of researching and planning out an idea, learning the skills to use and putting those skills into action in making a product. They also begin reviewing this product at the end (including receiving feedback on their product and giving feedback to others). There is also a focus on cooking at nutrition, with yearly cooking units for pupils.

In Key Stage 2 (KS2), pupils build on the skills they have developed in KS1 to enable them to be more detailed, accurate and competent in every part of the plan, do and review process. Pupils will design increasingly complex and challenging products, including using gears and electrical circuits. Additionally, there will be units on structures and sewing which will lead to pupils continuing to develop resilience as they make adaptations and critically evaluate their prototypes and designs. Cooking and nutrition continues to be a focus for all classes.

Milestones and assessment opportunities

Our milestone objectives and assessment opportunities ensure that there is clear progression and we know how to assess those types of knowledge and outcomes within a unit. Where possible, completed projects are shown (or photos of the finished product). The pupils will have opportunities to discuss and develop the skills being taught. Photos of work completed will be stuck in Art and Design books to support pupils with the evaluation stage.

Vocabulary

Tier 2 and Tier 3 vocabulary that is specific to each art and design skill or process is planned and delivered over each unit, building a bank of both words and knowledge items linked to their definitions, over time. This vocabulary is a core part of our knowledge organisers, and is specifically taught and referred back to.

Cross curricular links

Our school values are part of everything we do. To ensure that is seen within the curriculum, we make explicit links to our values, as well as British Values, Eco / Forest School and Rights Respecting Schools.

It is also important to understand how subjects can work with each other, so there are specific links to other subjects outlined in the Unit Maps.

Impact

We measure the effectiveness of our curriculum in the following ways:

- Pupil data tracking (PITA grids and Target Tracker)
- Book scrutiny
- Monitoring of lessons and planning (including from governors and external validation e.g. TKAT or WBC)
- Pupil conferencing

Supplementary support

We utilise the following support within our Design Technology curriculum:

- Design and Technology Association subscription (<https://www.designtechnology.org.uk/>)
- TKAT subject network meetings
- Local STEM projects.
- Connections with other curriculum areas