Subject Policy Design and Technology



INTENT: At Debden Church of England Primary Academy, all of our curriculum disciplines are used to underpin our school vision, which is to ensure that the children in our care:

- Progress exceptionally well academically, across a broad and knowledge-rich curriculum;
- Develop into confident compassionate, well-rounded individuals, in a safe, caring, Christian environment;
- Become equipped with the learning skills needed to deal with future challenges;
- Create happy, positive memories of their childhood.

Our Design and Technology curriculum has been carefully constructed through close consideration of both the expectations of the National Curriculum and the vision and contextual requirements of our school and its children. Through our DT curriculum, we aim to:

- Inspire children, through a broad range of practical experiences, to create innovative designs which solve real and relevant problems, within a variety of different contexts;
- Encourage children to utilise an iterative 'research, design, make, evaluate' process towards projects, systematically developing their key skills in each stage throughout each project.
- Equip children with a comprehensive knowledge of important technological vocabulary and processes, making incisive links with other subject disciplines, where appropriate;
- Influence children to become the next generation of innovators, through studying key individuals and technological achievements that have helped to shape the world, showing the impact of design and technology on the wider environment.

IMPLEMENTATION:

DT is generally taught in 'blocks' over the course of a half term (usually alternating with Art). We believe that this allows for greater depth of study, and increased opportunities to build schemata.

As a base for teachers planning, the 'Design and Technology Association' schemes of work are used to underpin unit structure and curriculum structure, however staff have the flexibility to adjust these schemes in order to best meet the interests and needs of their class.

Cross-curricular links in DT are abundant. Within any DT unit, children are applying the knowledge and skills that they learn about in a number of other subjects, for example maths (e.g. geometry and measurement), science (e.g. forces and working scientifically) and English (e.g. written and verbal communication). However, we have also endeavoured to align DT content with focus areas in other subjects. For example, children design and create toys in KS1, subsequent to learning about the history of toys in History and learning about special objects in Religious Education.

Knowledge organisers have been created for each unit, which enable children and parents to gain a well-rounded understanding of the principles underpinning learning in lessons. These are provided to children and their families at the start of each Design and Technology unit, outlining the key knowledge that the children will be learning about throughout their study. This allows families to support children's learning from home throughout DT units.

Across all units of study (aside from 'Food and Nutrition', which has its own skills map), children develop skills in 3

key areas (Researching and Planning, Making, and Evaluating). Our skills map demonstrates how children's proficiency in these areas is sequenced, enabling children to develop their skills over time.

An ordinary unit of Design and Technology should include at least one lesson in the research phase, 2-3 lessons of design, 2-3 lessons of making, and at least one lesson on evaluating (teachers are flexible with these guidelines, in line with their own professional judgement). Throughout the research/design, make, and evaluate process, we encourage children to take an iterative and reflective approach, continuously considering how products can be improved, applying changes, and reflecting on their effectiveness.

IMPACT:

Outcomes in journals and project folders, in addition to physical prototypes and photographs, evidence a broad and balanced DT curriculum and demonstrate the children's acquisition of identified key knowledge. Children review the agreed successes at the end of every session and are actively encouraged to identify their own target areas, with support from their teachers. Teachers assess each stage of the children's learning, including evidence of their research/ planning (included research notes, annotated sketches, step-by-step instructions, etc.) making (e.g. skills shown whilst making, in addition to the finished product itself) and the final, written evaluation. Teachers use the 'Monitoring Made Easy' documentation to assess children's learning and progress at the end of each unit (3 times per academic year).

Children also record what they have learned comparative to their starting points at the end of every topic. The Headteacher/subject leader meets with selected groups of children from each class to ascertain the knowledge that they have developed over the course of the term, checking their understanding using the knowledge organisers.