

Design Technology at The duke of Bedford

"Design is not just what it looks like and feels like. Design is how it works." – Steve Jobs, co-founder of Apple,Inc.

<u>Intent</u>

At the Duke of Bedford Primary School we intend Design and Technology to be creative and practical, providing children with the chance to problem solve and develop their own creative ideas as individuals and as part of a team. We aim to provide our children with the opportunity to use their imagination to design and make products within a variety of contexts, to provide motivation and meaning to their learning. Exploration and practical experiences of mechanisms, textiles, food technology, structures, and electrical systems will inspire our children to be chefs, engineers, sculptors, carpenters, designers and architects. Our children will leave The Duke of Bedford Primary school with life long skills that they can expand on and apply to future learning.

Implementation

- At The Duke of Bedford, DT is taught in every year group, once a week during the second half of each term. (alternates with Art)
- Each child has a DT exercise book to record the explore, design, make and evaluate process.
- To support teaching, staff access a range of resources and planning from The Design Technology Association, which is sometimes supplemented by resources from Plan Bee.
- Food technology is taught in every year group ensuring that children are aware of where food comes from, healthy balanced diets and how to prepare and cook delicious food, this is an intentional choice as we feel that cooking and nutrition are life long skills all pupils should develop and hone as they grow.
- Mechanisms are taught in four year groups exploring progressively more complex mechanisms, beginning with sliders and levers in Year 1, wheels and axles in Year 2, pneumatics in Year 4 and finishing with cams in Year 5.
- A unit of textiles is taught in KS1, lower KS2 and upper KS2 to ensure a progression of skills and chance to revisit skills.
- Children have the opportunity to design and build structures in Year 1, Year 4 and Year 6, this gives the children the opportunity to refer to previous learning and develop their skills as they grow.
- Children in year 4 and year 6 will have the opportunity to design and make a product with an electrical system which also links to their learning in Science.
- Through in-depth discussion and reflection children will be given opportunities to evaluate and improve their products.
- Teachers follow a clear progression of skills which ensures all pupils are challenged in line with their year group expectations and are given the opportunity to build on their prior knowledge.

All Design and Technology units of work follow the same cyclical steps:



<u>Evaluate</u> Pupils should test out their

completed products on their intended users. Feedback should be sought so that pupils can produce detailed and meaningful evaluations and suggest realistic future ammendments.

Define the problem that pupils are solving through this unit of work. Ensure the teacher written project title is shared and explored with pupils from the outset: Design, make and evaluate a ______(product) for _______(user) for _______ _____(purpose).

Practise and perfect

Pupils should have opportunities to test core skills required in order to successfully meet the brief. For example, combinging flavours, trying different joining stitches or creating different wood joins.

Make

Pupils should be given ample time for making thier product. Resources required should be readily available and not limit the opportunities and ideas of the pupils.

Design

Pupils should design thier own product which meets the brief, applying the initial invetigations and research as well as the skills practise they have completed. Designs should be detailed, with explanations of the choices made, resource lists and projected possible set backs.

Impact

Children will have clear enjoyment and confidence in design and technology that they will then apply to other areas of the curriculum. Ultimately, children will know more, remember more and understand more about Design and Technology, demonstrating this knowledge when using tools or skills in other areas of the curriculum and in opportunities out of school. The large majority of children will achieve age-related expectations in Design Technology. The skills and knowledge our children develop will be carried forward into secondary school and adulthood.