Curriculum Intent Statement for Design and Technology – March 2022

Design and Technology enables children to exercise their creativity and imagination through designing and making, and encourages them to become independent, creative problem solvers and thinkers as individuals and part of a team. At Ox Close, we seek to inspire all children through a broad range of practical experiences to create innovative designs which solve real and relevant problems within a variety of different contexts.

At Ox Close, the Design and Technology curriculum provides a coherently planned sequence of learning to ensure development of lasting knowledge and skills is acquired over the course of children's time at school. The curriculum is progressive and is adjusted in line with the needs and views of learners, with continuous professional development ensuring staff are equipped to deliver an ever-evolving curriculum.

Our Design and Technology curriculum provides children with opportunities to develop their designing and making skills with knowledge and understanding in order to design and make a product. The iterative design process encourages children to identify real and relevant problems, critically evaluate existing products and then take risks and innovate when designing and creating solutions to the problems. Evaluation is an integral part of the design process and allows children to adapt and improve their product – contributing to the development of a growth mindset, resilience, confidence and self-esteem, all in line with the school's mantra of 'Be The Best You Can Be'.

The revision and introduction of key vocabulary is embedded within the curriculum and children are given opportunities to formulate, discuss and present their views and opinions using subject specific vocabulary – supporting the development of children who are articulate, thoughtful, respectful and well-rounded global citizens, and providing a language rich environment. Furthermore, Design and Technology allows children to apply the knowledge and skills learned in other curriculum areas such as Maths, Science and Art, and makes links with topic work where appropriate.

Opportunities are provided for children to evaluate key events and individuals who have helped shape the world showing the real impact of Design and Technology on the wider environment and helping to inspire children to become the next generation of innovators – supporting the development of children's opinions and respect for the world in which they live.

By the end of EYFS children at Ox Close will have:

- *Learned through first-hand experience*
- *Been encouraged to explore, observe, solve problems, think critically, make decisions.*
- *Learned to construct with a purpose in mind*
- *Experienced using a range of tools such as scissors, tape, a stapler, elastic bands and glue to join with*
- *Practised simple cooking techniques such as stirring, mixing, pouring and blending ingredients*
- *Learned to record their experiences by drawing and writing*

By the end of Year 2 children at Ox Close will have learned:

- *how to make slider and lever mechanisms to make a product with a moving part*
- *how to make a moving vehicle using wheels and axles*
- *how to make a freestanding structure*
- *how to use simple templates and joining techniques in textiles*
  and

- *how to use a range of food processing equipment to prepare fruits and vegetables when making a simple food product*

By the end of Year 4 children at Ox Close will have learned:

- *how to make a product with a moving mechanism using levers and linkages*
- *how to make a product with a pneumatic mechanism*
- *how to make a 3D structure from a 2D net*
- *how to join 2D shapes to make a 3D product using joining techniques in textiles*
  and
- *how to use a range of appropriate equipment to create a savoury snack*

By the end of Year 6 children at Ox Close will have learned:

- *how to make a product with pulleys and gears*
- *how to use joining techniques to make a framed structure*
- *how to incorporate electrical switches and circuits to make a product*
- *how to combine different fabric shapes to create a textiles product*
- *how to use computer aided design to make a textiles product*
  and
- *how to mix and combine ingredients to make a savoury or bread-based food product*

For further information, please refer to the Design and Technology Curriculum End Point Document.