

Design & Technology

Intent, Implementation and Impact

Intent

Design and Technology is a stimulating, rigorous, and practical subject that plays a vital role in fostering creativity and well-being within our school community. At Boorley, we recognise the significant contribution that design and technology education makes in shaping innovative thinkers and problem solvers. Design and Technology aligns seamlessly with our school's 'Inspiring Minds' value, fostering creativity, innovation, and problem-solving among our students. Through this subject, learners develop the ability to think critically. By engaging in purposeful design processes, pupils apply their imagination and technical knowledge to create solutions that meet genuine needs.

Through Design and Technology, children are encouraged to develop creative and critical thinking skills, enabling them to address challenges both independently and collaboratively. We inspire our students to harness their imagination to design and produce solutions to real and relevant problems, considering a range of contexts and perspectives—including their own and those of others.

Additionally, Design and Technology at Boorley empowers children to express their individuality while fostering an appreciation for different viewpoints and ideas. We cultivate a culture of innovation and risk-taking, encouraging pupils to become forward-thinking designers who are prepared to contribute meaningfully to the world.

At Boorley, Design and Technology is a coherent, well-structured, and carefully sequenced subject, ensuring that students accumulate sufficient knowledge and skills over time. Our curriculum is planned to provide a progressive learning experience, allowing pupils to build upon prior knowledge while acquiring new, increasingly sophisticated skills.

All pupils have access to the full Design and Technology curriculum from Year 1 through to the end of Year 6. In Year R children are able to explore different joining techniques, trial cooking techniques when making playdough and weave with large paper / material. Our curriculum is designed to be inclusive, ensuring that every student engages in a broad and balanced range of learning experiences, progressively developing their knowledge and skills over time.

At Boorley, Design and Technology follows a structured design, make, and evaluate cycle, incorporating the precise use of technical language to enhance understanding and application. Throughout their time at Boorley, pupils engage in a diverse range of topics that encompass structures, mechanisms, cooking and nutrition, and textiles, ensuring a well-rounded and progressive development of design and practical skills.

<u>Implementation</u>

At Boorley, Design and Technology is delivered through a structured, engaging, and progressive curriculum that enables pupils to develop creative, technical, and problem-solving skills. There is a well-defined and structured progression of skills across each year group.

Design and Technology is delivered through discrete units of learning, taught once per term in an alternating cycle with Art. This structured approach ensures that pupils receive a balanced curriculum, allowing them to develop their creative, technical, and problem-solving skills while engaging in a variety of design processes and artistic expression.

Staff requiring additional support in Design and Technology receive assistance through scheduled meetings (when needed) aimed at enhancing subject knowledge and refining teaching strategies. This support includes the modeling of effective instructional practices, the dissemination of best approaches, and the introduction of new resources to enrich learning. Additionally, individualised guidance is provided through one-to-one support, addressing specific queries and assisting in overcoming challenges related to the delivery of Design and Technology concepts.

At Boorley, Design and Technology is assessed through formative approaches to ensure pupils develop a strong foundation in design principles, practical skills, and critical thinking. Throughout each unit, teachers continuously assess pupils' understanding and skill development through observation, questioning, and class discussions. Pupils receive feedback on their design processes, practical application, and problem-solving strategies, allowing them to refine their work and build resilience as designers. Pupils are encouraged to assess their own work by reflecting on their design journey and identifying areas for improvement.

At Boorley, the monitoring of Design and Technology (DT) work is conducted through: learning walks, pupil work scrutiny, assessment and feedback and pupil voice. Through this monitoring approach, we ensure that DT remains a high-quality, engaging, and meaningful subject that fosters both technical competence and imaginative thinking.

Diversity and inclusion are embedded in Design and Technology to ensure all pupils feel represented, valued, and empowered to engage in creative and innovative learning experiences. Pupils are encouraged to consider the needs of different users when designing products, fostering an appreciation for diverse perspectives, cultures, and abilities. Lessons incorporate a range of designers, inventors, and engineers from different backgrounds, highlighting contributions from underrepresented groups. All pupils, regardless of ability or background, receive the support and resources needed to engage meaningfully in DT activities. Adaptations are made to ensure accessibility in practical tasks. Group projects encourage teamwork, respect for differing viewpoints, and the celebration of individual contributions to shared creative outcomes.

<u>Impact</u>

Pupils at Boorley make strong and sustained progress in Design and Technology, developing a deeper understanding of design principles, problem-solving strategies, and technical skills as they move through the school. From the early years to Year 6, pupils build on their knowledge systematically through a well-sequenced curriculum. They start with foundational concepts such as simple construction, basic mechanisms, and introductory food preparation. As they progress, they refine their design thinking, improve technical precision, and work with increasingly complex

materials and processes. By Year 6, pupils demonstrate confidence in applying creativity, technical skills, and evaluation methods to real-world challenges.

Pupils acquire a breadth of knowledge across different aspects of DT, including structures, mechanisms, cooking and nutrition, and textiles. As they move through year groups, they apply prior learning to new contexts, showing a growing ability to plan, create, and evaluate designs with increasing independence.

Reflection activities, practical application, and discussions help pupils recall and apply previous learning effectively, leading to confident, skilled designers.

At Boorley, we ensure that pupils with Special Educational Needs and Disabilities (SEND) are fully supported in DT so they can confidently progress to the next stage or year group. This is achieved through a tailored and inclusive approach that considers individual needs while maintaining high expectations for engagement and achievement. Lessons are carefully adapted to accommodate different learning styles and abilities. Scaffolding, simplified instructions, and accessible resources help pupils develop their skills progressively while ensuring they remain engaged in the full DT curriculum. DT offers a tactile and experiential learning environment, which benefits SEND pupils by reinforcing concepts through physical exploration. Breaking down complex tasks into smaller, achievable components ensures that SEND pupils can retain and apply knowledge effectively. Discussions, visual aids, and revisiting key skills from previous learning help bridge any gaps and build confidence in their ability to succeed in DT.

Children engage with Design and Technology with enthusiasm, curiosity, and a sense of accomplishment. The subject fosters creativity, problem-solving, and hands-on learning, making it an enjoyable and rewarding experience for pupils. The children appreciate the practical nature of DT and enjoy the freedom to innovate and express themselves.