



Design and Technology Curriculum at Gaddesden Row School



Intent

Design and Technology provides an opportunity for lots of cross-curricular knowledge linked to our school policy of STEM. This is why at Gaddesden Row our D/T curriculum is taught with a focus being on links to science, technology, engineering, and maths. We aim to provide opportunities to develop children's knowledge and understanding in the following areas:

When designing and making within the different aspects of D/T, children should be able to:

- Think and talk about how things work, and to draw and model their ideas;
- Select appropriate tools and techniques to make quality products, whilst following safe procedures;
- Use and explore a range of materials, resources and equipment;
- Explore attitudes towards the world and how we live and work within it;
- Develop an understanding of technological processes, products, their manufacture; alongside their contribution to our society;
- Use the internet to explore ideas and existing products;
- Show motivation, enthusiasm, satisfaction, and purpose in designing and making products.

At Gaddesden Row, our children are given the opportunity to work **imaginatively** and **practically**, while having the opportunity to **design**, **make** and **evaluate** and have **reflection time**. We want all our children to learn by self-reflection and have the opportunity to work independently and as part of a group. This is embedded through our PSHE curriculum. Children can develop their skills, whilst building confidence and resilience, as well as giving them a real-life sense of responsibility to produce a finished product they are proud of.

Importance of Design and Technology

Design and Technology is a key subject for children to engage in as it promotes careers, particularly in the engineering sector. It encourages children's curiosity and creativity, as well as investigating important issues in our local community and wider environment. At Gaddesden Row, we understand how vital it is for our children to make decisions for themselves when working practically and using their imagination to create a high-quality product. D&T brings **learning to life** and provides a motivating context for learning in lots of other curriculum areas, often engaging children who lack confidence in other areas.

DT in Early Years

At Gaddesden Row School, we recognise the importance for children in EYFS to have a broad, play-based experience of D/T in a range of contexts, including outdoor play. The EYFS learning environment includes many opportunities for children to design, make and evaluate different models in the continuous provision. Our outdoor area has a specific construction area to meet this provision

and children can choose to use wood, cardboard, dough, large and small construction as well as different enhanced provision that is available at times throughout the year. Children gain confidence, control and language skills through opportunities to explore using a range of cutting, tearing, folding and building techniques. This helps develop their fine and gross motor skills. This are of the curriculum is a great motivator and something that we promote as a school.

Implementation

At Gaddesden Row School, we use the **Planbee Scheme of Work** to ensure that the statutory National Curriculum objectives are covered to teach our D/T Curriculum. We aim to link this to topics and themes and plan STEM enrichment weeks around this. Teachers can then plan effectively and deliver high-quality D&T units of work. The National Curriculum progression of skills is used to plan and deliver lessons to our mixed-age classes, so coverage is met.

As part of our implementation process, children have access to a wide range of tools that are relevant to each unit and are encouraged to select these appropriately, based on the task. Children are also given the opportunity to explore a range of materials, resources, and equipment, so staff are expected to anticipate what they'll need as much as possible prior to the beginning of the unit, with enough time to order high-quality resources.

We promote our children to understand that if something doesn't go according to their original plan when creating a project, they are taught to reflect and accept that this is part of the design and make process.

STEM subject leader

The STEM subject leader monitors the quality of teaching/learning in D/T across the school and ensures that it is being delivered effectively. STEM Action plans are produced to ensure that D/T is closely monitored and reviewed within the school. Pupil discussions and staff questionnaires are carried out regularly to monitor the subject throughout school and pupil voice is done after a D/T enrichment week.

Impact

At Gaddesden Row School, we make observations of the children's work regularly throughout each stage of each unit in D/T and then once the unit is complete, we use teacher assessment as to whether they have met the key objectives of the unit. Assessments are recorded onto the schools' D/T assessment tracker, and these are used to inform future planning and this information is passed on to the next teacher at the end of the year. Every child will evaluate their work and write or give verbal evaluations for their work.

We promote for all D/T work to be recorded in different ways including written analysis, photographs, post-it notes used as working pupil voice and drawings. Work in children's D/T will be passed through school with the child so that there is clear evidence of progression through their journey at Gaddesden Row School. Photographs of each finished product are taken to put in children's books and to be displayed across the whole school. Our parent app, 'Marvellous Me' is used to share children's work and rewards.

Overall impact of a high-quality D/T curriculum will be all children meeting age-related expectations and some reaching greater depth.