

Teaching and learning of: Design and Technology

INTENT	At Hook-with-Warsash C.E. Academy we aim to give children an engaging and comprehensive Design and Technology curriculum where skills, knowledge and understanding are developed through projects based in textiles, mechanisms, structures, electrical systems and food. We follow the National Curriculum through the use of 'projects on a page' documents which is an approved scheme of the DATA (Design and Technology Association). The curriculum follows a progressional skills development plan. In all year groups pupils design, make and evaluate real products that are intended for real people for real purposes.		
Underpinned by	Knowledge	Mastery	Vocabulary
	We follow the 'projects on a page' documents which is an approved scheme of the DATA (Design and Technology Association) and have a mastery based approach to the DT National Curriculum. Each project recaps and then builds on prior learning so that all pupils are able to secure and embed their DT skills, knowledge and understanding as they move up the school. 1. Textiles 2. Mechanisms 3. Structures 4. Electrical systems 5. Food	We aim to develop a mastery approach to Design and Technology through acquiring a deep, long term, secure and adaptable understanding of the subject and the skills within it. There are certain principles and characteristics which characterise this approach. They are: • An expectation that all pupils are capable of accessing DT projects and lessons. This is achievable through using supportive resources, adaptability of design, freedom in altering the product and intended final outcome. • An expectation that all pupils are capable of achieving high standards in DT. This is realised through high quality teaching, a consistent teaching approach throughout the school, encouraging individual choice, embedding resilience when things go wrong, nurturing problem solving when issues arise and supporting the skills, knowledge and understanding that are required at all the different stages of the designing and making processes. • The majority of the pupils progress through the curriculum content at the same pace. Challenge is through encouraging high quality outcomes, providing	Pupils will be exposed to, and become confident in their understanding and use of, Design and Technology vocabulary. Regular DT terminology is used, shared, clarified and modelled consistently within each unit of work. Children are exposed to specific DT terminology within each project area. Pupils are then encouraged to understand and use the vocabulary accurately in their verbal and written work.

		greater freedom of choice, allowing independent problem solving, stimulating child led adapting/altering of the product being made. • An expectation that all children can achieve success in all the different design and technology areas- textiles, mechanisms, structures, electrical systems and food. This is made possible by following the National Curriculum and DATA (Design and Technology Association) expectations.	
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IMPLEMENTATION	The teaching of Design and Technology in our school follows a spiralling curriculum where skills, knowledge and understanding are built upon through each year group and every project. Each year group has DT focus once each term. During these units DT lessons are taught weekly with a specific task each week- evaluating current products on the market, generating initial ideas, detailed final design, final make and evaluating the finished product. This process is taught consistently throughout the school allowing for each area to be continuously developed over time. Food technology is implemented across the school with pupils developing an understanding of how to prepare and cook foods, the importance of a healthy, varied and balanced diet and an appreciation of where food comes from. Design and Technology is taught with a cross curricular focus ensuring projects support and enhance learning in other subjects.		
	SEND / Disadvantaged Design and Technology lessons and activities can be adapted to meet the needs and learning styles of all children. A variety of DT learning resources are used to ensure that all pupils can access lessons and achieve success including social stories, visual breakdowns of the making processes and 'get things wrong and move on' support sheets. The design and making stages have flexibility which caters for individual choice and allows for adaptation or alteration where needed. Task design and outcome objectives are modified according to each child's specific individual needs.	EYFS Fundamental Design and Technology knowledge and skills are introduced at the EYFS. It is here that the building blocks are put in place for all subsequent projects. Early DT is taught through topic based activities with a big emphasis on exploration and experimenting. Children are introduced to early skills such as cutting, chopping and sticking whilst trialling different tools and materials. Children create a product and construct it.	Feedback, Questioning and Discussion Feedback is given at the point of teaching and may be written but is usually given verbally and in the manner which moves learning forward, addresses misconceptions, or helps to embed learning and aid retrieval. Questioning and especially discussion play a vital role. Pupils are encouraged to think deeply about Design and Technology and all its different areas of focus. An integral part of every DT lesson is the discussion around the skills, knowledge and understanding that is needed for this subject. Mistakes- in designing, making or evaluating stages- are dealt with in a positive and constructive manner in order to develop resilience, perseverance and confidence.

IMPACT	When children leave Hook-with-Warsash C.E. Academy their learning in Design and Technology will have enabled them to be confident in designing, making and evaluating products that are made for real people for real purposes. They will have developed a deep understanding of the knowledge and skills needed for textiles, mechanisms, structures, electrical systems and food projects. Children will have an appreciation for how design and technology impacts the world around them and affects their daily lives. They will have been inspired to further their pursuit of DT opportunities by seeking future educational studies in this area and potentially careers.		
	Pupil Voice	Evidence in knowledge and skills	Breadth and depth
	Pupils will be given opportunities to feedback on their experiences in Design and Technology through discussions and reflection on their work and projects. Success is judged on whether pupils are positive, confident and actively engaged in DT and able to recall prior learning and identify progress including skill development, knowledge growth and understanding advancement.	Progress is clear in all areas of the designing and making process (evaluating current products on the market, generating initial ideas, detailed final design, final make and evaluating the finished product). Progress in these can be monitored by the teacher as there are 3 units of work per class per year. Evidence of progress is provided in the form of teacher observation, through discussion with the pupils, questioning, work produced and products made. Skill, knowledge and understanding development is judged at the end of a unit of work and compared to the prior unit of work to which it is linked (textiles, mechanisms, structures, electrical systems and food). Record of assessment is kept through assessment forms which are completed at the end of a unit of work stating whether the child is WTS, ARE or GDS for that given project. These are used to develop planning in Design and Technology focussing on next steps and what support is needed. At a whole school level, we look for trends across groups, skills and projects which informs future actions and plans.	The curriculum builds spirally project to project to ensure that pupils can recap on and embed learning before building in new knowledge and skills. A greater level of skill, knowledge and understanding is shown through promoting high quality outcomes, providing greater freedom of choice, allowing independent problem solving, stimulating child led adapting/altering of the product being made.