"Where children are at the heart of every decision to inspire brighter futures"

Respect, Responsibility, Recognition and Resilience

Design and Technology Curriculum Delivery Document

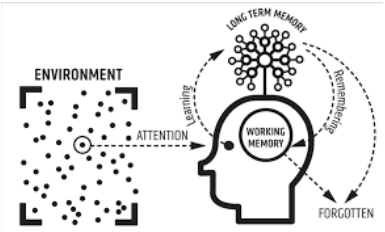
Intent	At Girnhill, Design and Technology is taught through the ambitious National Curriculum and the Early Years outcomes, enhanced by our wider themes linked with various curriculum areas. Through our high-quality Design and Technology curriculum, children will develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. Children will be encouraged to research, interpret and present themselves as a designer/technician whilst building and applying a high level of knowledge, understanding and skills in order to design and make high-quality, purposeful and functional products for a wide range of users. Children will learn to explore, evaluate and test their ideas and products, and the work of others whilst being encouraged to talk like a designer/technician and use subject specific vocabulary with accuracy. The National Curriculum and EYFS statements are covered in full in our Design and Technology progression grids and long-term plans, which ensures a carefully thought out sequence of experiences, knowledge and skills that build on children's prior knowledge. This ensures children are not only excited about their learning but also beginning to know more and remember more about their learning. Design and Technological skills, such as, planning, sewing, joining, evaluating, chopping and constructing are weaved throughout the topics in our two-year cycle, providing our children with opportunities to make pertinent links within the purposeful products they produce and their wider learning. We believe this enables our children to successfully retrieve knowledge from their long-term memory whilst building on skills as they move through school. Dual coded vocabulary is also planned with clear purpose and progression to allow children to develop their oracy and leave school being able to articulate their knowledge and understanding as designers/technicians within our increasingly technological world.
Implementation	We ensure that all teachers, including those who are non-specialists, are supported with the implementation of the curriculum; providing specific schemes of work to support all teachers in this area. Based on Rosenshine's theory, learners have the opportunity to revisit and build on prior knowledge consistently across the entire curriculum. Daily review activities are used at the beginning of every session in order to activate prior learning and give children a solid foundation that they can link their new learning to. High-quality modelling of skills and language is offered to our children and scaffolds are provided for children to access and support learning in every session. We also ensure the children are familiar with the design cycle:

	Design – use research and develop design criteria to design for a purpose and communicate their ideas through a range of mediums. Make – use a wide range of tools and equipment with accuracy and use a wide range of materials and components according to their qualities Evaluate – evaluate their ideas and products against their own design criteria and consider the views of others to improve their work Through exposing children to this process, we aim to develop their technical knowledge and vocabulary in relation to structural design, mechanical and electrical systems, the integration of technology and food production and nutrition. Questions are progressively planned for and are used to check understanding and allow children to apply their D&T knowledge. Classroom working walls promote dual coded vocabulary that is specific to current learning as well as clear modelled examples.
Impact	Learners have the knowledge and skills to work like a designer/technician. Pupil voice will show that children can talk about their D&T knowledge and carefully evaluate their designs and products using subject specific vocabulary. When they leave each phase, most learners have the knowledge, skills and vocabulary necessary to progress to the next stage of their learning. As a result of high-quality teaching, learners make sustained progress in Design and Technology and their books will reflect their confidence in the use of the design cycle to design and make products from start to finish.

What do our lessons look like?			
Introduction	**Teacher Input**	**Pupil Activity**	**Ongoing Assessment**
Daily review	Introduce key vocabulary	Guided student practice	Questioning
	Present new materials using small steps	Independent practice	Check for understanding and address misconceptions
	Provide models	Use of scaffolds where needed	Reviews
	Provide scaffolds	Obtain high success rate	Daily, monthly, weekly reviews

How do we ensure that knowledge gained is transferred from the working memory into the long-term memory?

Rosenshine's principles in action (bridging research and classroom practice) is providing support and strategies to secure pedagogical understanding for staff.



Principles identified	What do we expect to see in our Design & Technology lessons?
Daily Review	Daily review is used at the beginning of every D&T lesson to activate previously taught skills, vocabulary and knowledge. Examples of this include: think, pair, share; this or that; project evaluation; call and response; flashcards of previously taught vocabulary; true or false; bingo boards
Questioning	A variety of key questions are individually planned by teachers prior to delivering the lessons. The questions progress through the units of work encouraging children to 'dive deeper' with their answers. Staff will also encourage 'say it again better' where applicable and use techniques such as cold calling, 'tell me how and why' and think, pair, share to ensure ALL children have opportunity to answer and subject specific language when responding orally. Questing allows staff to check understanding and address misconceptions. Some of the questions don't require an answer there and then, but are for the children to consider as they practice their skills and begin to use and apply these. Consider….. How can you? What happens if? Question stems are used to scaffold children's responses, these are verbal and visual. Link to steps to success. Show me, say it again better, cold call, tell me how and why.
Sequence concepts and modelling	Modelling is provided by the teacher, support staff or even peers. These models are high-quality and repeated many times with the children in different ways. Children are given time to practise the application of skills for as long as needed. Teacher's model the exact subject specific vocabulary and sentence stems needed to plan, design, make and evaluate products in Design and Technology. Lesson plans are progressive but broken down into small steps. Scaffolds are used to support all children in achieving the learning objective This might be in the form of adult support, displayed dual coded vocabulary and definitions, and sentence stems. The model and steps to success/success criteria are visual throughout lessons.
Stages of practice	Close supervision during guided practice from the staff. Providing instant feedback to learners. Time for independent practice when the learners are ready to use and apply their skills, knowledge and understanding.