Intent, Implementation and Impact Overview

Subject Leader Curriculum Intent, Implementation and Impact Overview			
Subject: Design & Technology		**Subject Leader: Faye McKay, Katherine Cowley & Debbie Sanderson**	
Intent	**Research link**	**Implementation**	**Impact**
Our Design and Technology curriculum's intention is to inspire children to be innovative and creative thinkers who have an appreciation for the product design cycle through ideation, creation, and evaluation. At Balksbury Federation children's confidence is developed so that they take risks through: drafting design ideas, making and testing. They are also encouraged to be reflective learners who evaluate their work and that of others. At Balksbury Federation children are encouraged to become resourceful, enterprising citizens who will have the skills to contribute to future design advancements. At Balksbury Federation, children are encouraged to develop a love of cooking through developing their cooking skills and their understanding of what healthy eating and nutrition.	*'Results of numerous studies indicate that metacognition plays a significant role in students' design education.'* **Kavousi et al. (2019)** *'Design is essentially problem solving applied to a particular form…, educators should devise instructional activities that facilitate metacognitive components.'* **Kavousi et al. (2019)** *'Engineering has little curriculum presence and there is limited awareness and understanding of it among young people and their influencers. We must improve knowledge of engineering. There is also an acute shortage of STEM teachers and they are likely to experience new pressures and challenges in the year ahead. We need to support teachers and schools to deliver high quality STEM education and careers guidance.'* **Dr Hilary Leevers, Chief Executive, EngineeringUK (2020)** *'Students develop a critical understanding of the impact of design and technology on daily life and the wider world. Additionally, it provides excellent opportunities for students to develop and apply value judgements of an aesthetic, economic, moral, social and technical nature.'* ***Design and Technology Association (2020)***	The Design and Technology curriculum at Balksbury is designed to allow pupils to respond to design briefs and scenarios that require consideration of the needs of others. Children develop knowledge and skills in five key areas: • Mechansims • Structures • Textiles • Cooking and Nutrition • Electrical systems (KS2 only) The three main stages of the design process are all incorporated within Balksbury's four keystones: • **Design** Key Stone 1: Engagement • **Make** Key Stone 2: Developing Knowledge and Skills Key Stone 3: Innovation • **Evaluate** Key Stone 4: Expression The progression of knowledge and skills lays out the key skills and technical knowledge taught within each year group and how these develop to ensure the attainment targets are securely met by the end of each key stage. The progression of knowledge and skills also lays out how children revisit and build on previous learning, supporting staff to challenge and support children.	Children are engaged and excited in their Design and Technology learning. All children will leave Balksbury Federation having developed their Design and Technology knowledge and skills to lead them onto the next stage of education (KS3). Children will apply technical knowledge they develop to design, make and evaluate a range of products. They will use their creativity, problem solving and analytical skills in order to independently design and make innovative products, with a purpose. Children are reflective learners who can adapt and improve on their work and others. Children share with others their own, and other people's, successes as well as suggest possible improvements and alterations. Children will leave Balksbury confident in their understanding of the principles of healthy eating, nutrition and how to apply this to their future lives.

	'The UK is struggling with an annual shortfall of 59,000 engineers. So, we need more young people to choose a future in engineering. We believe the solution is to engage young people at an early age with exciting, industry relevant Design and Technology lessons.' **James Dyson Foundation (2020)** *According to the* ***NHS National Child Measurement Programme****, when children leave primary school approximately 1 in 5 are overweight or obese(England). To tackle this issue, schools are focussing on prioritising healthy eating through the food they provide and* ***the curriculum children experience****…Design and Technology: Food's contribution is to enable children to understand the issues facing themselves and others, create and modify recipes to meet these needs and to cook and evaluate a variety of dishes. Therefore, consideration should be given to ensuring that the projects and recipes used reflect our national healthy eating priority, facilitating a whole school approach to health, education and creativity.'*	Lessons are engaging and accessible to all through an incorporation of a range of teaching strategies and differentiation. Wherever possible Design and Technology is linked to children's learning in other topic areas and real-life problems so that children are supported in understanding the value of Design and Technology and how it has shaped, and continues to shape, our world. The Balksbury Design and Technology curriculum ensures all children have one cooking and nutrition unit each year from year 1 to year 6. Other cooking opportunities are to be built in and linked to other topics, to provide a wide range of opportunities for cooking.	