DEEP DIVE:

Curriculum area: Design and Technology

‘Excellence Every day’

INTRODUCTION

Our curriculum is at the heart of our educational provision, offering a broad and exciting daily offer to ignite a love of learning in all of our pupils.

Our vision is focused on ambition, aspiration and progression and this is delivered through our curriculum model.

All of our pupils have the opportunity to experience hands-on learning and experiences which enrich their classroom activities. This may be through trips, external visitors to the schools or virtual experiences as well as workshops. Our aim is to close the gap in disadvantage and offer all pupils an inspiring provision which gives equal access to all.

Learning in **Illuminate Minds Trust schools** is more than the acquisition of skills and knowledge. It is also the chance to widen opportunities and expose pupils to a world beyond their lived experiences. We see our role as preparing children and young people for life and society, helping to build sustainable communities where people care about each other and the world around them.

Every subject area has a curriculum which is constructed carefully around sequential learning, revising prior learning and recognising the links between this and future steps. Embedded within each area are enrichment experiences, references to career choices and links to cultures and backgrounds which reflect our pupil population.

Choice is central to our learning offer. Our schools want to equip pupils with the confidence to make their own choices and exposure to experiences which inform those choices. You cannot consider a path in life of which you are unaware.

In order to grow and develop, it is vital that our pupils have the confidence and motivation to accept challenges and recognise that learning is not always easy. We want our pupils to face challenges without fear and know that they can make mistakes, because life will throw things at them and they have the ability to solve problems and overcome them. Success breeds success. Having confidence through actually seeing you can achieve and you can find a way through difficulties is key in continually building the self-awareness and resilience which will enable our pupils to manage themselves through life. Recognising the value of education and knowing that life is about continual learning means that loving learning from the outset is vital. Our curriculum in every subject is shaped to take children on that journey....

CURRICULUM AREA: DESIGN AND TECHNOLOGY

Intent

At Illuminate Minds, our Design and Technology curriculum enables children to become creative, resourceful and confident designers. Pupils develop the knowledge and practical skills needed to design and make purposeful, functional and appealing products for a range of users and purposes.
Our curriculum encourages children to investigate existing products, solve problems and make informed choices about materials, tools and techniques. Through practical experiences in mechanisms, structures, textiles and food and nutrition, children develop technical knowledge alongside creativity and critical thinking

Implementation

Our carefully sequenced curriculum follows the design process of research, design, make and evaluate, underpinned by the development of technical knowledge. Children investigate existing products and use their findings to develop design criteria for a clear purpose and user before selecting appropriate materials, tools and techniques to create their own products. Practical skills are progressively developed across mechanisms, structures, textiles and food and nutrition. As children move through the school, they work with increasing accuracy and independence, progressing from simple designs and joining techniques to annotated sketches, prototypes, more complex mechanical and electrical systems and increasingly sophisticated products. Evaluation is embedded throughout the design process. Pupils test and reflect on their products against their original design criteria, considering feedback and making improvements to develop increasingly successful products.

Impact

Children develop the knowledge, practical skills and confidence to design and make purposeful products. They are able to select and use tools, materials and techniques with increasing accuracy and independence, applying their technical knowledge to solve problems and make informed design decisions. As pupils progress, they are increasingly able to research existing products, develop clear design criteria and communicate their ideas through sketches, plans and prototypes. They test, evaluate and refine their products, explaining how successfully they meet their intended purpose and identifying improvements. By the end of Key Stage 2, pupils approach the design process with increasing independence, creativity and resilience.

CURRICULUM AREA: DESIGN AND TECHNOLOGY

Cultural Capital

Children explore a wide range of products, designers, engineers and real-world applications of Design and Technology, helping them understand how design shapes everyday life. Practical experiences across textiles, food, structures, mechanisms and electrical systems expose pupils to skills and processes beyond their everyday experiences. Children develop an understanding of how products are designed for different purposes and users and how innovation can respond to real-world needs.

Equality and Diversity

Our DT curriculum enables children to explore products and designs created for a range of people, purposes and contexts. Pupils consider the needs of different users when developing their own design criteria, recognising that successful design should be purposeful and accessible. Through exposure to designers, engineers and products from different backgrounds and contexts, children develop an appreciation of the diverse people and ideas that shape the designed world.

Our SEND Approach

Our DT curriculum provides all pupils with opportunities to design, make and evaluate purposeful products. Quality First Teaching, explicit modelling, visual examples and practical demonstrations support pupils in developing technical knowledge and practical skills. Appropriate adaptations to tools, materials and processes remove barriers while maintaining the ambition of the curriculum. Scaffolds support pupils through the design process while enabling increasing independence, creativity and problem-solving.