The intent, implementation and impact statement for the delivery of the DT curriculum
Our Vision for Emmanuel

To create a welcoming Christian community where every child is viewed as a special person created and loved by God. Every member of our school community is valued for who they are and empowered to be the best they can be. We support every child to develop into lifelong learners who are resilient, socially skilled, and successful in all aspects of their lives.

'Start children off on the way they should go, and even when they are old they will not turn from it.' (Proverbs 22:6)

At Emmanuel, we provide an ambitious curriculum, challenging all children to aspire to be the 'best they can be'. All children learn in a highly inclusive environment which engages them to achieve great outcomes and reach their potential. We provide the children with a broad and balanced curriculum where the substantive and disciplinary knowledge the children need to acquire is coherently planned and sequenced allowing knowledge to be built on and embedded. Due to the careful sequencing of the curriculum, the children use their prior knowledge to allow them to learn new concepts. This curriculum design, supports all children to be courageous when faced with new challenges.

As Paul said in his letter to the Philippians 'I can do all things through him who strengthens me.' (Philippians 4:13 ESV)

Emmanuel's curriculum intent for DT

Our intent aims to ensure that all pupils:

1.Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.

2.Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.

3.Critique, evaluate and test their ideas and products and the work of others.

4. Understand and apply the principles of nutrition and learn how to cook.

This reflects the disciplinary knowledge set out in the national curriculum (2013) for DT.

For our intent to be reached all pupils will be able to:

1. use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups

2. generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

3. select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately

4. select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

5. investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

6. understand how key events and individuals in design and technology have helped shape the world apply their understanding of how to strengthen, stiffen and reinforce more complex structures

7. understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]

8. understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]

9. apply their understanding of computing to program, monitor and control their products.

10. understand and apply the principles of a healthy and varied diet

11. prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques

12. understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

This reflects the substantive knowledge set out in the national curriculum (2013) for DT.

Our intent is to ensure that all pupils gain success against the composites (end points/final outcomes) set out in the national curriculum to enable them to be secondary ready and flourish in their next step of their DT education.

The implementation of our DT Curriculum

Our Curriculum

Our curriculum has been designed to ensure that all pupils make progress towards achieving the desired end points set out in the national curriculum by the end of key stage 2. They will do this through acquiring the substantive and disciplinary knowledge which has been broken down into coherently sequenced component parts. When the pupils acquire the knowledge required to be successful against each component, this learning will then be built on sequentially to ensure that each small step leads to all pupils attaining the desired end point (composite). Our DT progression documents set out the sequence of learning.

The curriculum has been designed with the concept of memory in mind. Our curriculum is designed to ensure the children know and remember more by incorporating a 'spiralised' curriculum where concepts are revisited to facilitate learning being transferred into the long-term memory. Concepts are consistently revisited and regularly reviewed with retrieval practice (both daily and spaced) being central to our curriculum. Content and concepts are revisited and built upon throughout academic years and year groups.

In order to fulfil our intent, the Design and Technology curriculum follows a three-part system, guided by the National Curriculum, of 'Design, Make, Evaluate'. This means children will have the opportunity to develop, build and explore their creations' strengths and weaknesses, using assessment strategies to propose improvements. DT is divided into six areas of study for each key stage to study. Teachers plan lessons using projects on a page and planners provided which carefully follow the below three-part system.

Designing

Children will be given the opportunity to work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment.

Making

Children will select tools and equipment suitable for the task and explain their choice of tools and equipment in relation to the skills and techniques they will be using.

Evaluating

Children will evaluate their own products as well as others to identify the strengths and areas for development. They will consider the views of others, including intended users, to improve their work about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products.

Substantive and disciplinary knowledge and vocabulary are introduced progressively and revisited regularly to help children know and remember more. The progression documents ensure the curriculum is fully covered and that children are appropriately challenged from year group to year group and purposeful links are made between areas of study to allow children to revisit and embed concepts.

Teaching

Our teachers focus on teaching simply, practicing thoroughly, feeding back constructively and embodying excellence. The teaching strategies employed across school are used to facilitate the pupils to know and remember more.

DT Provision	
Individual lessons	Our DT lessons follow a structure of retrieval and review of prior knowledge leading to the teaching of new content through carefully sequenced precise small steps. Children are provided with the opportunity to practice what they have learnt and apply their knowledge to a different context. • DT lessons are planned to enhance English skills and opportunities for writing are included in the teaching and learning sequence. • A key component of each part of every lesson is the teaching of accurate DT vocabulary to support the children to reason and explain their interpretations of what they have discovered.
Inclusive DT provision	We have an ambitious DT curriculum which is highly inclusive and supports all children to gain success and reach their potential. All new learning is based on the substantive and disciplinary knowledge stated in the DT progression document and due to the spiralised nature of the curriculum where component parts are revisited, all new knowledge builds on prior knowledge in a coherent fashion allowing all children to access the curriculum.

Assessment

The accurate assessment of children's DT knowledge is critical to ensure all children have the required factual background knowledge needed to access the next component identified in our progression documentation. We use assessment tools to accurately identify gaps in pupil knowledge to ensure that precise support is provided to enable all children to gain mastery over each concept.

Assessment for learning: assessing as we teach by observing and questioning to inform next steps needed for each pupil to make progress against the learning objective.

Assessment as learning: we use ongoing assessment strategies such as retrieval practice and generative learning activities to consolidate learning and help children deepen knowledge in the long-term memory.

Assessment of learning: we carry out a pre-assessment of children's background knowledge to accurately plan a series of lessons taking into account the children's starting points. Teachers also carry out end of unit assessments to identify any gaps in the children's understanding to ensure they are able to apply their knowledge to the evaluation of their products.

Desired Impact of our DT curriculum

The desired impact of our DT curriculum is that all pupils acquire the substantive and disciplinary knowledge set out in our DT progression documents so children's learning is built on sequentially and coherently across the year groups. Through this careful scaffolding of learning, the children's knowledge will be built on to ensure they attain the end of Key Stage 2 composites set out in the national curriculum.