

Intent

At Ellington Primary School, we are committed to providing a purposeful, enriching, and relevant curriculum that fully prepares learners for the next steps in their school career and their future life and career beyond school. We want our children to *believe and achieve* and understand that it is essential that they appreciate the world they live in. We aspire in our curriculum to give children the belief that they are capable of achieving great things. We aim to provide children with a Design and Technology education that is relevant in our rapidly changing world and a curriculum that embodies our school intent: we intend to provide a wide range of inclusive opportunities, that ensure our children have a secure body of knowledge and effective critical thinking skills, which enable them to lead life with the highest of aspirations and contribute to life in modern Britain and the global community.

Through our DT scheme of work, we aim to build awareness of the impact of Design and Technology on our lives and encourage pupils to become resourceful, enterprising citizens who will have the skills to contribute to future design advancements. We want pupils to develop confidence to take risks through drafting design concepts, modelling, and testing and to be reflective learners who evaluate their work and the work of others.

We believe that our Design and Technology curriculum, which is driven by our curriculum drivers, key concepts and the Kapow scheme of work, gives the children the knowledge and understanding they need to think independently, innovatively, and creatively. Our Design and Technology curriculum is taught in a way that ensures progression of skills and builds upon previous knowledge. It is intertwined throughout other curriculum areas, and it is linked throughout our school's key concepts. The scheme meets the requirements of the National Curriculum and helps the children to meet the attainment targets within each Key Stage.

Our curriculum drivers are at the core of everything we do and underpin our shared belief that our role is to raise children's aspirations, develop independent thinking and learn about cultures, families and ways of life that may be different to our own. We believe it is our responsibility to show children that there is a world of opportunities awaiting them. Our Design and Technology curriculum is driven by our curriculum drivers and key concepts which are:

Aspirations

To develop a culture of high aspirations within design and technology at Ellington Primary School, we create a level platform where all children feel they can achieve, create and thrive in DT.

Engaging in a meaningful design and technology curriculum at primary school level undoubtedly raises aspirations amongst pupils. Understanding the principles of design and technology and mastering a range of problem-solving skills by the time pupils leave year six, opens up a world of possibilities as they progress through the education system, allowing them to engage with the modern world effectively. In a rapidly changing world technology must be embraced: we seek to ensure children can work collaboratively and become adaptive learners who have a rich skillset that they can draw upon to solve real life problems. We believe that it is particularly important to ensure that all children have an equal opportunity to engage with design and technology at school, regardless of gender or social economic background.

Wider World

Children engage regularly in activities which help them to work together as a team to help solve problems and create designs; considering their own and others' needs, wants, and values. Children in design and technology lessons, across all year groups, should be designing and making Something for Somebody for Some Purpose.

Through experiencing and exploring such work and having contextual discussions, our curriculum develops pupils' learning and understanding of the wider world, celebrating diversity by promoting a positive school culture that values and respecting diversity.

They will be frequently asked to collaborate with each other, listening and including others' ideas in the content that they are creating. Children will explore key designers and inventors –both locally and globally– to discover how realworld problems are solved with products and how these are meaningful to them. This will help to broaden their horizons. This helps children to connect with the wider world and gives them access to a wealth of information about different cultures, their needs and their design products and we constantly strive to ensure that they are tolerant of the ideas of others.

Independent Thinking

Our design and technology curriculum allows children space and opportunity to attempt putting new learning into practice. This type of active learning supports working memory and helps children to embed key knowledge. The Design and Technology curriculum will help to ignite creativity, encourage independent and innovative thinking, give a greater procedural and technical understanding, and encourage teamwork. This enables children to build on prior knowledge and experiences and develop their self-confidence and independence. They will be given choices to make, to help solve problems and will be given a platform to solve these in their own way, encouraging them to think independently as they work. As children progress, they are able to think critically and develop a more rigorous understanding of Design and Technology.

Implementation

The teaching and implementation of our design and technology curriculum at Ellington Primary School is based on Kapow Primary. The curriculum follows a spiral approach with key areas revisited again and again which helps the children to build upon their previous learning. Lessons incorporate a range of teaching strategies from independent tasks, paired and group work including practical hands-on, computer based and inventive tasks. Lessons are engaging and appeal to a variety of learning styles. Differentiated guidance for every lesson helps to meet our aim to encourage all children to reach their full potential. This includes setting challenges to stretch and challenge pupils. Knowledge organisers for each unit support pupils in building a foundation of factual knowledge by encouraging recall of key facts and vocabulary.

Strong subject knowledge is vital for staff to feel confident in their approach. Each unit of lessons includes multiple teacher videos to develop subject knowledge and support ongoing CPD. Every effort has been made to ensure that teachers feel supported to deliver lessons of a high standard that ensures pupil progression.

The busy timetable of other curriculum areas necessitates us to timetable a combined Art and Design and Technology approach. This means that classes carry out either art or design for half a term and then swap for the next half term. We also have extra standalone lessons which can be used if time allows. The problem-solving approach helps to carry out cross curriculum tasks. This helps to embed learning from English, Maths, Computer and Science in a purposeful context. We aim to have Art, Design and Technology open days to help build links with parents and their understanding of these subjects.

What will I see if I visit a Design and Technology lesson at Ellington?

Knowledge check: An opportunity at the beginning of the lesson to revisit prior learning to support with the recall and retention of key knowledge as well as addressing misconceptions.

Creative, quality first teaching: Teachers at Ellington Primary School work collaboratively with children to bring children's learning to life. Teachers ensure that all children, including those with special educational needs, access high quality teaching to ensure they have the tools and resources they need to succeed.

Clear instruction: Teachers will deliver lessons which have been carefully planned and modelled to provide the best possible teaching and support for the children.

Skillful questioning: Questioning is carefully planned into the curriculum to aid discussion with children about their work. Staff use responses to form parts of the assessment process, reflecting on the children's understanding of what has been taught.

Work we are proud of: We celebrate beautiful work driven by our value of 'Pride' we teach children the importance of well-presented, carefully planned work. At Ellington Primary School, we believe every child is an artist.

Creative, Safe and Supportive Environment: Children and adults work together to make classrooms safe and happy places to be. Children will be provided with the knowledge and skills needed to successfully achieve expected outcomes in Design and Technology. Children will be able to investigate, explore, experiment, problem solve and try new approaches to their work and will be supported by staff who can facilitate these processes. They will be able to evaluate, revisit and improve their work. Our Design and Technology curriculum mirrors the inclusive practice we have across Ellington Primary School and each design and technology lesson includes support and strategies to allow all

children to succeed. Children are reminded of personal safety and risk assessment. We use the Zones of Regulation to support children in making positive choices around their behaviour and refer to class charters and school rules.

Links to our curriculum drivers and school values: Wherever possible, teachers highlight links to curriculum drivers and school values so that children recognise their importance and support their learning. For example, links may be made with careers relevant to that subject or unit of work.

Links to Design and technology and working designers: Background information is provided to the children about the specific important and influential designers studied in each block.

Lock it in: Completed in the plenary, this activity is an opportunity to assess key learning from the lesson and is used to support future planning.

Impact

The impact of the curriculum on the learning of our children will be measured using formative assessment throughout the year by teachers. Teachers assess children's development in skills and knowledge, and how they work towards meeting the statements provided in the national curriculum and Kapow.

Children at Ellington Primary School will thrive in their Design and Technology lessons which they value as they appreciate its importance and role in our daily lives. The expected impact is that the children will:

• Understand the functional and aesthetic properties of a range of materials and resources.

• Understand how to use and combine tools to carry out different processes for shaping, decorating, and manufacturing products.

• Build and apply a repertoire of skills, knowledge and understanding to produce high quality, innovative outcomes, including models, prototypes, CAD, and products to fulfil the needs of users, clients, and scenarios.

• Understand and apply the principles of healthy eating, diets, and recipes, including key processes, food groups and cooking equipment.

- Have an appreciation for key individuals, inventions, and events in history and of today that impact our world.
- Recognise where our decisions can impact the wider world in terms of community, social and environmental issues.
- Self-evaluate and reflect on learning at different stages and identify areas to improve.

When children leave Ellington, they are more resilient individuals who persevere through challenges and have a growth mind-set that is nurtured and encouraged by teachers.