KING'S NORTHWAY
PRIMARY ACADEMY

SCHOOLS OF CHARACTER
MAKING GREAT LEADERS

Design Technology Policy

GREAT SCHOOLS TRUST

Document Control

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King's Northway Primary Academy

Design and Technology Policy

Introduction:

King's Northway Primary Academy is a strong and distinctive community, where we value each other as part of the family. We show this through our planning, our teaching, our relationships and respect for each other as individual learners. We are all learners – no matter our age or time within this or another School.

Learning potential is realised most when parents and teachers work in partnership. We believe in our children and we want our children to believe in themselves – they will then 'believe and achieve'. We set ourselves the high standard of: All learners, All achieving, All the time. Our Policy for Teaching and Learning is underpinned by this ethos.

The King's Northway Curriculum has a golden thread that links a rich tapestry of knowledge, interwoven with key skills and allows children to engage with, connect with and understand their locality and rich cultural offer and take their places as global citizens in the twenty first century.

The King's Northway Values for Victory exemplifies an ethos that builds community and provides the expectations for excellent attitude and learning behaviour. The curriculum is planned to allow children to explore, evaluate and improve. Children know the high expectations and are encouraged to strive for success in all that they do. Children are nurtured so they can engage with their learning without barriers and reach their own potential. King's Northway understands that aspiration is good but aspiration for all: all learners, all valued, all achieving…all the time.

Our Curriculum is a progressive programme of study, where children are exposed to knowledge and skills year on year. Children should see the 'big picture' as they progress through school and see building blocks coming into place. They will be immersed in a rich vocabulary and text-base to inspire a love of learning and given the opportunity to share their knowledge. Children can exemplify their prior knowledge and staff teach from this starting point, knowing the expectation for their specific year group. Low state quizzing for pre-assessments endeavour the development of sticky knowledge and post-assessment give children the satisfaction of achievement. Each subject area is taught discretely but has clear cross-curricular links and crossover of skills. We give core subjects and basic skills a strong emphasis but passionately believe in a wide, broad, rich curriculum, where children have deeper learning experiences and develop a life-long love of learning…developing dynamic and industrious citizens for Liverpool and the world who can make a positive contribution.

Excellence, enjoyment, enrichment, progression and relevance are all key principles of our King's Northway Curriculum from Nursery to Year 6.

1. Statement of consideration of equalities in all policies and procedures

This policy outlines the teaching, organisation and management of Design and Technology taught at King's Northway Primary Academy. The policy has been drawn up as a result of staff discussion and has the full agreement of the Governing Body. The implementation of this policy is the responsibility of all teaching staff.

2. Intent

The King's Northway Design Technology Curriculum has a golden thread that links a rich tapestry of knowledge, interwoven with key skills and allows children to engage with, connect with and understand their locality and rich cultural offer and take their places as global citizens in the twenty first century.

Through our Design and Technology curriculum we aim to develop children who can approach a range of challenges which reflect real life contexts. We aim for children to become resourceful and innovative in their approaches to tasks posed.
Children are given the responsibility to work with technical tools and equipment safely. Children leave King's Northway Primary Academy with the ability to plan, design, build and evaluate a range of high-quality products becoming enterprising and capable citizens.

Our Design Technology Curriculum is a progressive programme of study, where children are exposed to knowledge and skills year on year. As they progress through the school, children should see the 'big picture' and see building blocks coming into place. Low state quizzing is completed via Entry and Exit Tickets, which support the development of sticky knowledge , give children the satisfaction of achievement and inform future planning. Design and Technology is taught discretely at King's Northway but has clear cross-curricular links and crossover of skills. Children's knowledge and skills will be assessed at the end of each unit through critical discussion and the use of our Balance assessment system.

<u>Objectives</u>

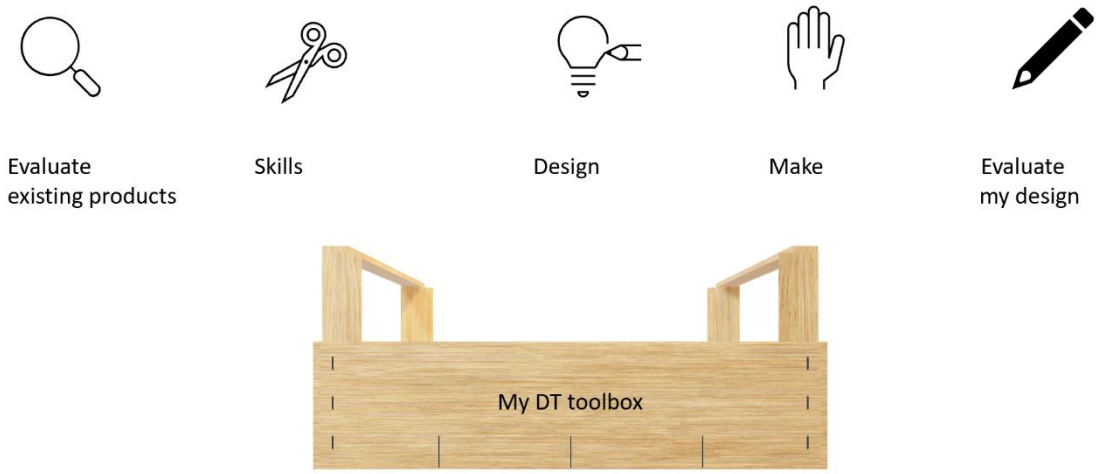
The national curriculum for design technology aims to ensure that all pupils:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- 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
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook.

3. Implementation

Scheme of Work

At King's Northway we have designed our own bespoke Northway Design Technology curriculum which delivers the national curriculum aims in rich and knowledge focused manner. Our curriculum ensures that there is a clear progression of knowledge, skills and techniques from Early Years to Year 6. The whole school long term planning document is attached in the appendices (appendix 1.1). We plan and deliver lessons using our 'DT Toolbox' (see figure below), ensuring our pupils evaluate existing products, develop skills, experiment with a range of design processes, and then use this knowledge to make an innovate product that fits a brief. Pupils will then evaluate their own products and make comments on successes and ways to improve their work.



Resources (Including Ipads)

All pupils at Northway have access to a wide range of high-quality Design Technology resources and are encouraged to explore and experiment with these in all units of study. Pupil's also have access to Ipads with software which can be used for design studies, computer aided design and control.

Safety considerations

At all times, children will be taught how to care for and handle equipment and media safely and with respect. When working with tools, equipment and materials, in practical and in different environments, including those that are unfamiliar, pupils will be taught:

· About hazards, risks and risk control.
· To recognise hazards, assess consequent risks and take steps to control the risks to themselves and others.
· To use information to assess the immediate and cumulative risks.
· To manage their environment to ensure the health and safety of themselves and others.
· To explain the steps they take to control risk.

Learners who need more

Learners who need more is a key part in our school curriculum policy, and we aim to provide a rich and immersive education for all our children. Our teachers deliver appropriate learning opportunities which meet the needs of all pupils, including our learners who need more and of

those learning English as an additional language. We believe Design Technology allows children to creatively experiment and explore using a range of materials, applying their knowledge to real life situations.

Knowledge Organisers

All pupils have access to Knowledge Organisers for Design Technology. These Knowledge Organisers are specific to their year group and the core mediums of study. They are there to support the pupil's understanding and recall of technical knowledge and vocabulary that they will use during their units of work.

Educational Visits / Fieldtrips

At King's Northway Primary Academy providing rich learning opportunities is our golden thread and we ensure that all pupils have access to extra-curricular clubs, educational visits and fieldtrips. During their time at Northway pupils will have visits and talks from local engineers, chefs and designers and engage with real world products to support their own designs.

4. Impact

Outcomes and Assessment

We measure the impact of our personalised programme of study using Balance. Our formative assessment tool is used to record pupils' understanding of an objective and helps to plan for opportunities to learn more and remember more. All children from Year 1 to Year 6 use an ongoing Design Technology exercise book, which demonstrates a clear progression of knowledge, skills and understanding. Each unit includes opportunities for them to showcase cross-curricular skills, including written reflections, mathematics approaches to techniques, historical and geographical research concerning designers, and discussion around personal and cultural values.

5. Progression within the subject

Early Year Foundation Stage

At King's Northway we provide a rich Early Years environment in which we encourage and value creativity and exploration. We relate the children's creative development to the objectives set out in the Early Learning Goals. The pupil learning includes designing, making, tinkering, cookery, baking and the safe use of a range of tools. These experiences encourage our pupils to make connections between one area of learning and another, extending their understanding. Pupils are engaged in a wide range of activities, developing children's fine and gross motor skills through the manipulation of a range of tools. We allow all pupils the opportunity to work alongside designers and other adults and ensure the activities that they take part in are imaginative and enjoyable.

Key Stage One and Two

Key skills and key knowledge for Design Technology have been mapped across the school to ensure progression between year groups. This also ensures that there is a context for the children's work in Design and Technology; that they learn about real life issues and problems and how they could be solved, as well as developing their skills throughout the programme of study. Skills learnt and implemented in previous units are revisiting and developed in future units.

6. Monitoring and Review

Subject leaders at King's Northway are responsible for monitoring the way in which their subject area is implemented across the school. The subject leader monitors the subjects through:

- Provide a lead and direction for the subject in consultation with colleagues, written policies and guidance.
- Ensure efficient resource management for their subject.
- Monitor and assist in the evaluation of the delivery of their subject area across the school.
- Monitor pupil progress within their subject area, including pupil interviews (Golden Conversations), book looks, learning walks, deep dives and data analysis using Balance.

Role of the subject lead

It is the role of each subject coordinator to keep up to date with developments in their subject, at both national and local level. They review the way the subject is taught in the school and develop yearly action plans to ensure targets are being met and progress is made. The subject leader reviews the curriculum plans for their subject, ensures that there is full coverage of the National Curriculum and that progression is planned into schemes of work.

7. Role of the pupil / parent

Pupils are expected to engage with Design Technology lessons with enthusiasm and explore new designers, knowledge and techniques alongside their peers. They will share their expertise with their peers and across the school to build knowledge and confidence. Pupils are encouraged to take part in Design Technology competitions and clubs both in and out of school.
Parents are given opportunities to share in their children's Design Technology work through the use of Seesaw and workshops.

Appendix 1.1

	Unit 1	Unit 2	Unit 3
Year 1	**Mechanisms** *Sliders and Levers*	**Cooking and Nutrition** *Sandwiches*	**Textiles (joining)** *Puppets*
Year 2	**Structures** *Zoo Enclosures*	**Cooking and Nutrition** *Dips and Dippers*	**Wheels and Axels** *Moving Vehicle for Teddy*
Year 3	**Mechanisms** *Levers and Linkages*	**Cooking and Nutrition** *Bread*	**Textiles (fastenings)** *Pencil Case*
Year 4	**Cooking and Nutrition** *Pizza*	**Structures (Shell)** *Desk Tidy*	**Mechanisms** *CAMS - Toys*
Year 5	**Electrical Systems/Structures** *Torches*	**Cooking and Nutrition** *Coconut Chicken Curry*	**Mechanisms and Control** *Programming*
Year 6	**Cooking and Nutrition** *Meat/Vegetable Stew (Scouse)*	**Mechanisms/Structures/Electrical system** *Fairground Rides*	