

Granby Junior School



Design and Technology Policy

Review Date	Approved by	Governor Minute Reference
September 2024		

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The new 2021 policy was created after a whole school review of Design and Technology in the curriculum and written to reflect updated requirements.

Introduction

This document is a statement of the aims, principles and strategies for the teaching and learning of Design and Technology at Granby Junior School.

This policy will be reviewed by the Design and Technology Co-ordinator in Dec 2024 or as required by the School Improvement Plan.

Curriculum Statement

Intent

Design and Technology Intent

At Granby Academy, Design and Technology is a vehicle to inspire our children to be the best young designers. Through exploration, creativity and evaluation, we create a breadth of knowledge and skills to create brilliant citizens. This enables our children to be practise skills needed to successfully participate in our ever-increasing technological world.

Children will participate in weekly enterprise project related to year group specific topics and will use a range of creative, practical and extensive evaluation to be fully immersed. Our work is underpinned by our core values: 'CARE by enriching the children with different career prospects, exciting local projects and individuals, regardless of race, gender or background'.

Aims and Objectives

Aims

Design and Technology offers opportunities for children to:

- Develop their designing and making skills whilst inspiring interest and enthusiasm
- Develop knowledge and understanding
- Develop their ability to create products combining their designing and making skills with their knowledge and understanding
- Develop their imagination and creative thinking

Objectives

Our objectives for each child are:

- To be able to communicate their ideas using a variety of methods, and to transfer these ideas to design
- To acquire and refine the practical skills when using simple tools, materials and processes e.g. planning, measuring, marking out and cutting
- To value their work and that of others
- To evaluate their work and identify what they could have done differently or how they can improve their work for the future
- To work individually and co-operatively as part of a group
- To be able to select appropriate tools, techniques and materials for a specific task

Implementation

Teachers will create a positive attitude to Design and Technology learning within their classrooms and reinforce an expectation that all pupils are capable of achieving high standards. Design and Technology is delivered through a creative, cross curricular themed topic-based curriculum which follows Curriculum Maestro 2022 and is supported by STEM specific projects.

Whole class teaching, co-operative group work, paired work and individual work are all utilised as appropriate by teachers to enable children of all abilities to progress. Discussion, research, designing and evaluation underpin how we embed design and technology into the children's everyday lives.

Children have access to key language and meanings, in order to understand and readily apply to this to their written and verbal communication of their skills.

Granby Junior School will be participating in a design and technology week where children will design a class project around a similar theme, showcasing these to the rest of the school. The development of a STEM afterschool club provides opportunity for children to extend their love of Design and Technology.

Achievement in Design and Technology is promoted through display, discussion and demonstration to encourage independent questioning and investigation in class. Children's written work is marked in line with the school's current feedback policy, allowing children to recognise and reflect on their own achievements.

Teaching and Learning Style

At Granby Junior School we use a variety of teaching and learning styles in Design and Technology lessons. Our principal aim is to develop the children's

knowledge, skills and understanding in design and technology. We ensure that as the children design and create within different projects, they are encouraged to explore and develop their ideas through questioning and by evaluating their work. Children may work as a class, as a co-operative group or individually.

Teachers draw attention to good examples of individual performance and encourage children to evaluate their own ideas and the work of others and to say what they think and feel about them.

Guidelines

1. All children are given equal opportunities to follow the National Curriculum for DT, which states DT will incorporate
 - Investigative skills where children disassemble and critically evaluate existing products to inform their own design. (IDEA)
 - Focused Practical Task (FPT) where children are given an opportunity to learn and practice new skills and techniques
 - Design and make assignment (DMA) this is where children are allowed to be creative using what they have learnt through FPT.
2. Work is planned to ensure progression of content and skills across each Key Stage, appropriate to the children's ages and abilities.
3. Cross curricular links are made with other subjects, including ICT, where appropriate.
4. Children develop and practise particular skills and knowledge working with a range of tools, materials and equipment in a variety of ways.
5. Children investigate, disassemble and evaluate products before designing and making their own.
6. All children are made aware of Health and Safety issues when undertaking work in DT.

Assessment and Monitoring

Within each unit of work expectations are given for children at varying levels of ability. These should be used to assist teachers in their assessment of children's progress, to inform future planning and to contribute towards enhancing future performance. This includes the child's ability to evaluate and develop work, commenting on similarities and differences between their own pieces and those of others. Computer aided design can be accessed on Purplemash by class teachers when making their assessments.

A written report is provided to parents in the Summer term to advise on each child's attainment, attitude and effort in Design and Technology.

For a more detailed account of Assessment and record keeping please refer to the school's feedback and assessment Policies.

Teaching Design and Technology to Children with Special Needs and Disabilities

At Granby Junior School we recognise that we have children of differing ability in all our classes. We provide a broad and balanced education for all children. The learning opportunities are matched to the needs of all children. It should also be recognised that some children who experience difficulties in work of an academic nature may excel with work that has a practical nature. We take into account the targets set for individual children in their Individual Education Plans (IEPs) and adapt tasks to suit the ability of each child. For more able children design and technology offers them an opportunity to develop their designs and practical skills and we therefore provide activities to extend their learning.

It should also be recognised that some children may have disabilities or impairments which could give rise to difficulties in participating fully in the lesson. In accordance with the school's Disability Discrimination Policy, reasonable adjustments will be made to the delivery of the lesson and where possible, additional resources will be made available to ensure any such children are still able to participate fully in the lesson and activities.

Equal Opportunities

At Granby Junior School we aim to be an inclusive school which celebrates diversity and encourages respect for every individual. We give due regard to the Equalities Duty and aim to tailor our curriculum and school life in general to meet the needs of all pupils regardless of the 8 protected characteristics.

Health and Safety

It is the responsibility of the teacher to manage the risks involved in an activity and make appropriate arrangements to safeguard the pupils' health and safety. Such arrangements would include careful adult supervision when using tools in the classroom.

Resources

Basic equipment and materials e.g. scissors, glue, rulers etc can be found in each classroom. More specialist equipment and materials e.g. cutting mats, wheels and straws can be found in the Design and Technology resource area or arts cupboard. Specialist woodwork equipment is located in 6L behind the curtain.

Recycled materials e.g. fabric, boxes, cardboard tubes, plastics etc are acquired as and when needed. In accordance with health and safety advice we do not collect or use toilet rolls or egg boxes in school.

Cooking

Children will be provided with the opportunity to acquire knowledge in healthy eating and about the importance of a balanced and varied diet. During this time, children prepare and make a savoury dish (they will be able to access the ovens for this). Furthermore, as part of ECO, children get the opportunity to learn about food sources and to grow their own fruit and vegetables in the school gardens.

Computing

We make provision for the children to use the computer and other ICT resources where appropriate. We incorporate computing in our design and technology planning where appropriate. The children may also use appropriate graphic programs to use in the design of their models. For example it could be possible to produce patterns, shapes and templates using PurpleMash.

Equality and Inclusion

Children of all abilities enjoy and benefit from the study of Design and Technology at Granby Junior school, and teachers are able to adapt teaching to respond to the strengths and needs of all pupils enabling them to achieve.

Teachers have a secure understanding of how a range of factors can inhibit pupils' ability to learn and know how best to overcome these through adaptive teaching. High-quality teaching approaches to engage and support the needs of all pupils are used **within classrooms/hall/etc as applicable** during Design and Technology lessons. Assessment of pupils' progress is employed to identify barriers to learning and develop strategies to support all pupils through a graduated response – including but not limited to those with SEND, those of high ability, and those with English as an additional language.

Adaptive Design and Technology teaching focuses on the whole class while providing scaffolding such as differing levels of support, access to resources, modelled first step examples or focused questioning to those who need additional initial support or challenge in order to access the same ambitious curriculum and meet our high expectations.

Diversity

At Granby Junior school our curriculum offers a diverse view of the world, beginning in our local community and extending beyond. Through the lenses of British values, children are positively exposed to a range of role models, reflected within the wider society, redressing the balance seen within our local community.

In Design and Technology children learn about diversity both in terms of cultural diversity and that of gender. This is shown by Jonathon Ive, Elijah McCoy, Dr. Aprille Ericsson-Jackson, Heddy Lemarr, Patricia Bath and Nikola Tesla

Role of Co-ordinator

The design co-ordinator is responsible for the monitoring of the quality of teaching and the standards achieved by the children. The co-ordinator is also expected to support the teaching of Design and Technology by offering advice on resources, activities and current developments.

At appropriate intervals the design co-ordinator should be released to observe Design and Technology lessons. This is in line with the schools monitoring process for all subjects. Following the observation the lesson is discussed with the class teacher involved and a record made of the evaluation. Copies are given to the class teacher and Headteacher.

It is the responsibility of the co-ordinator to ensure each year group gives a detailed breakdown of resources required for their topics throughout the year and that a resource bid is made to the finance manager.