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Design and Technology Policy

Reviewed on: 16th September 2025

Next Review due: Autumn 2027

Signed by:

A handwritten signature in black ink, appearing to be 'J. Hopper'.

Chair of Governors

Signed by:

A handwritten signature in black ink, appearing to be 'Mrs O. Hopper'.

Headteacher

RANELAGH PRIMARY SCHOOL-
POLICY FOR DESIGN & TECHNOLOGY

INTRODUCTION

Design and technology is an inspiring, rigorous and practical subject. Pupils use creativity and imagination; they design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and use cross curricular skills from mathematics, science, computing and art.

Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

At Ranelagh Primary School we are committed to providing a curriculum for design and technology that provides a broad range and depth of the highest quality.

This policy provides a clear background, which will support all forms of design and technology done in school. It reflects the perceived needs of all the children as expressed in whole school aims and policies and also in the statutory orders for National Curriculum for design and technology.

It is intended that this policy will:

- i. **Provide a whole school statement of purpose;**
- ii. **Ensure that each pupil's entitlement to experience of design technology is realised;**
- iii. **Provide a clear basis from which to plan programmes of work;**
- iv. **Provide guidance and support to all teachers.**

VISION STATEMENT:

Through our provision for design technology at Ranelagh, we encourage children to:

- Enjoy the creativity of planning and making
- Be able to talk about and appreciate the work of other artists/ crafts people
- Be able to evaluate their work and suggest ways to improve
- Be keen to develop and refine their skills
- Work with a range of skills, tools and media with confidence
- Be able to apply their knowledge and understanding to their own work

We also aim to use digital media to enhance our delivery of design and technology, as we recognise that this plays an important part in today's society.

AIMS AND OBJECTIVES:

Design and technology is essentially a practical subject that allows children to think imaginatively and creatively and to become more autonomous and effective problem solvers, both as individuals and as part of a team. Our aim is to provide children with a rich and enjoyable experience of design and technology, in which they can acquire and develop their own researching, designing, making and evaluating skills.

Our objectives in teaching design and technology are:

- To develop imaginative thinking in children and to enable them to talk about what they like and dislike when designing and making

- To enable children to think and talk about how things work, and to draw and to model their ideas
- To encourage children to select appropriate tools and techniques to make quality products, whilst following safe procedures
- To use and explore a range of materials, resources and equipment
- To explore attitudes towards the made world and how we live and work within it
- To develop an understanding of technological processes, products, their manufacture and their contribution to our society
- To use the internet to explore ideas and already made products
- To foster enjoyment, satisfaction and purpose in designing and making things
- To understand and apply the principles of nutrition and learn how to cook.

CURRICULUM PLANNING:

The units of work for design technology are based on the National Curriculum and are taken and adapted from the D & T Scheme of Work, Project on a Page, QCA schemes of work, or from published plans in the subject resources area. In Key Stages 1 & 2, the areas of Cooking, Electrical Systems, Mechanical Systems, Structures and Textiles must each be covered. As long as all areas are covered, units may be delivered in any order, varying on their relevance to the topics being taught each term.

We plan the activities in each key stage, so that they build upon the prior learning of the children. Whilst we give children of all abilities opportunity to develop their skills, knowledge and understanding, we also aim to build planned progression into the scheme of work, so that there is an increasing challenge for the children as they move up through the school.

Each class's medium-term plans are shared on the server and the school website and these give details of each unit of work for each term. These plans define what we will teach and ensure an appropriate balance and distribution of work across each term. The leader of design and technology is responsible for reviewing these plans.

EARLY YEAR FOUNDATION STAGE:

We encourage the development of skills, knowledge and understanding that help Nursery and Reception children make sense of their world. We relate this development to the objectives set out in the “Early Years Foundation Stage” (Practice Guidance), which underpins the curriculum planning for children aged from birth to five. This learning forms the foundations for later work in design and technology. These early experiences include asking questions about how things work, investigating and using a variety of construction kits, materials, tools and products, developing making skills and handling appropriate tools and construction materials safely and with increasing control.

We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking, discussion and decision making. These activities take place both indoors and outdoors, and are designed to arouse the children’s interest and curiosity.

Throughout the Foundation Stage, activities and opportunities are planned where children can learn through talk, play and their own life experiences. Children in the Foundation Stage will experience a variety of activities including:

- Choosing and exploring a variety of materials such as fabric, card, paper, wood, boxes etc.
- Learning how to use scissors safely and correctly,
- Exploring a variety of joining techniques such as PVA glue, Pritt stick, masking tape, elastic bands, sellotape, treasury tags, split pins, paper clips and string to join materials together,
- Taking part in both cooking and non-cook food activities, learning about the importance of food hygiene,
- Having opportunities to explore creating models using a wide range of construction kits that fit together in a variety of different ways,

- Having opportunities to talk about and explain how they will/have made their model and to discuss what they like/dislike about it,
- Folding and shaping paper in order to create a range of structures.

COOKING AND NUTRITION

As part of their work with food, children will be taught how to cook and apply the principles of nutrition and healthy eating, opening the door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables children to feed themselves and others affordably and well, now and in later life.

In Key Stage 1, children will be taught to:

- Use the basic principles of a healthy and varied diet to prepare dishes;
- Understand where food comes from.

In Key Stage 2, children will be taught to:

- Understand and apply the principles of a healthy and varied diet;
- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques;
- Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

DESIGN AND TECHNOLOGY ACROSS THE CURRICULUM:

At Ranelagh, we aim that as much work as possible is topic-based and inter-connected. Consequently, every opportunity is taken to use design and technology to enrich other areas of the curriculum.

For instance:

English -

Design and technology contributes to the teaching of English by providing valuable opportunities to reinforce prior learning. Discussion, drama and role-play are important ways for the children to develop an understanding that people have different views about design and technology. The evaluation of products requires children to articulate their ideas and to compare and

contrast their views with those of other people. Through discussion, children learn to justify their own views and clarify their design ideas.

Maths-

In Design and technology, children learn to measure and use equipment correctly, generate nets of shapes in order to create packaging and weigh and measure accurately. They will also learn about size and shape and make “real” use of their mathematical knowledge in order to be creative and practical in their designs and modelling.

Science-

Science helps in design and technology, looking at and drawing electrical circuits. It also helps children to think about using materials to create structures which can withstand a force. Also, STEM projects such as Science, DT and Maths are often combined within many of our projects.

Computing-

Computing (ICT) enhances the teaching of design and technology, wherever appropriate, in all key stages. Children may use software to enhance their skills in designing and making things. Younger children are able to use simple software to enhance their learning. Older children use ICT to collect information and to present their designs through a range of design and presentation software.

Personal, Social and Emotional Education (PSHE-)

Design and technology contributes to the teaching of PSHE, encouraging children to develop a sense of responsibility in following safe procedures when making things. They also learn about health and healthy diets. Their work encourages them to set targets and meet deadlines. They will also learn how to prevent disease from spreading and about personal hygiene when working with food.

INCLUSION:

At our school we teach design and technology to all children, whatever their ability. It forms part of the school curriculum policy to provide a broad and balanced education to all children. Through our teaching of design technology we provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's

different needs. Assessment against the National Curriculum allows us to consider each child's attainment and progress against expected levels.

When progress falls significantly outside the expected range, the child may have special educational needs. Our assessment process looks at a range of factors – classroom organisation, teaching materials, teaching style and differentiation – so that we can take some additional or different action to enable the child to learn more effectively.

We enable pupils to have access to the full range of activities involved in learning design and technology. Where children are to participate in activities outside the classroom, for example, a visit to a gallery, we carry out a risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

EQUAL OPPORTUNITIES:

At Ranelagh, our teaching of design and technology provides equality of opportunity:

- Boys and girls are able to participate in the same curriculum
- Gender stereotyping is avoided when organising pupils into groups, assigning them to activities or arranging access to equipment
- Fullest participation possible is enabled to pupils with disabilities or particular medical needs. Where necessary, positive role models are offered and provision is made to facilitate access to activities with appropriate support, aids or adaptations.

DIFFERENTIATION:

We recognise the fact that we have children of differing ability in all our classes, and so we provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies:

- setting common tasks that are open-ended and can have a variety of responses;

- setting tasks of increasing difficulty where not all children complete all tasks;
- grouping children by ability and setting different tasks for each group;
- providing a range of challenges with different resources;
- using additional adults to support the work of individual children or small groups.

LINKS WITH THE WIDER COMMUNITY:

We aim to involve the wider school community in our efforts and in particular parents and families. To encourage participation by the wider community, we invite parents into the school to view work created by the children and participate in creative projects at home and in school.

We have been involved with design technology projects with a local high school (Chantry Academy) and companies, such as Dance East and we are always keen to accept and create such opportunities.

STAFF DEVELOPMENT:

Teachers at Ranelagh have access to regular continuing professional development to refresh their personal creativity and keep them up to date with developments. This may be through workshops or courses provided locally or alternatively, it may be gained in-house, by seeking expertise from other staff able to share their knowledge and good practice. When it is regarded to be useful to colleagues, information from any course attendance is routinely shared.

ASSESSMENT:

There will be informal on-going assessment by teachers to ensure continuity, progression and achievement in design and technology.

Children's achievement in design and technology will be matched against the National Curriculum level descriptors. Effective assessment also includes the

pupils' own responses to their learning, either in an oral or written form, as well as the elements of planning, teaching, reporting, recording and evaluating. There will be a collection of work in sketchbooks to ensure progression.

During each term, we give verbal reports for parents on the progress of their children, with a summative assessment of children's progress in design technology over the year being provided in their end of year report during the summer term.

HEALTH AND SAFETY:

When working with tools, equipment and materials, in practical activities and in different environments, including those that are unfamiliar, pupils should 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 abide by simple safety rules when using tools or equipment.
- To explain the steps they take to control risks

It is the responsibility of the subject leader to pass on any relevant Health and Safety information to all other staff who teach these subjects. It is the responsibility of each individual member of staff to ensure that they store tools and materials with due regard, and organise their working environment / practices in a safe way.

Areas for special concern include:

- The use of hot-melt glue guns and drills. These both require pupils to wear adequate eye protection (goggles) and to be aware of what to do in the event of a minor injury.
- Food technology lessons require that hygiene is given the utmost priority. Activities involving the use of cookers / ovens / microwaves require a high level of supervision with appropriate safety / protective clothing being available.
- Fabric work that involves scissors, sharp cutting tools, pins and needles requires careful resource management. Children should be taught simple storage strategies for dealing with sharp objects that are 'not in use'.

- Construction kits may pose some small risk (particularly at KS1) and children should be warned of the dangers of placing pieces in their mouths etc.
- Safe practices for handling soft mouldable materials should also be taught to minimise small pieces being inappropriately used!
- Contact with foodstuffs and other materials likely to cause allergic reactions should be avoided.

Please also refer to the school Health and Safety Policy for further information.

RESOURCES:

Resources for design and technology are paid for out of the central school budget, which is allocated according to need and priority. Budget information and resource needs are reviewed on a yearly basis.

Each year there is a review of the provision. An audit analysis is completed considering the areas we need to develop as a school. Funding is put in place to achieve these aims.

Resources-

We have a good range of resources available- these are stored in the lower level storage cupboards. If specific items are needed for a unit for work, they are requested at the beginning of the term in which they are needed.

Reference books and unit plans are also available in the lower storage room.

MONITORING AND REVIEW:

Excellence and enjoyment in design technology is celebrated in a variety of ways: displays in classrooms and throughout the school, in our 'Good Work' assemblies, school productions and on the school website. We have also displayed work within the local community.

The monitoring of the standards of children's work and of the quality of teaching in design and technology is the responsibility of the subject leader and SMT. The work of the subject leader also involves supporting colleagues in the teaching of design and technology, being informed about current

developments in the subject, regularly evaluating the impact of our provision and providing a strategic lead and direction for this subject in the school.

A curriculum review is made annually which reports on achievements and indicates areas for further improvement.