# Ryelands Primary and Nursery School

Design & Technology Policy

This policy was developed as part of a consultation process involving pupils, staff, parents and Governors of the school, based on best practice advice (where available) from Lancashire County Council.

The implementation of this policy will be monitored by the school leadership team

This policy should be read in conjunction with the following documents:

- Key Learning documents for Design and Technology
- National Curriculum
- EYFS Statutory Framework
- Teaching and Learning Policy
- Curriculum Policy
- E-Safety Policy
- Child Protection Policy
- Health and Safety Policy

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| **Policy Created:** | | | | | |
| **First Presented to Governors for approval:** | | 3rd February 2016 (Curriculum Committee) | | | |
| **Proposed Review Cycle/Date:** | | 3 Year | | Next Review: May 2028 | |
| **Review History** | | | | | |
| **Approved by (Headteacher)**<br><br>**Date:** | | **Approved by (Governor)**<br><br>**Date:** | | | |
| **Date**: | June 2019 | **Date:** | May 2022 | **Date:** | March 2025 |
| **Key Changes:**<br>• No changes, date only | | **Key Changes:**<br>• No changes, date only<br>• Further amendments to skills progression expected in 2022/23 academic year | | **Key Changes:**<br>• Use of progress documents (sections 4, 5,<br>• Non-Core assessment spread sheets<br>• Seed to plate document (appendix 2) | |
| **Presented to Governors:**<br>Curriculum Committee 5th June 2019 | | **Presented to Governors:**<br>Curriculum Committee 21st June 2022 | | **Presented to Governors:**<br>Curriculum Committee 25th June 2025 | |

## 1. Ryelands School – Mission Statement

***RYELANDS PRIMARY AND NURSERY SCHOOL MISSION STATEMENT***

Ryelands is a welcoming community school where care and nurture, alongside high expectations and challenge, enable the pupils to progress and achieve academically, and empower the wider school community to develop and thrive.

We work with many partners to provide a well-resourced, stable and supportive hub extending into the community, creating positive relationships based on inclusivity, trust and mutual respect, as well as growth.

Ryelands offers an engaging and aspirational curriculum, based on the Primary National Curriculum and the Early Years Statutory Framework. Our curriculum is adapted to the unique place where we live and the skills and values we promote. Our curriculum, alongside exceptional teaching, inspires a love of school and learning.

At Ryelands, pupils are encouraged and challenged by staff to **imagine, believe, achieve.**

## 2. Aims

The aims of Design and Technology in this school are to provide opportunities for children to experience designing, making and modifying and to use a wide range of materials including card, textiles, construction materials and food. We aim to develop children's design and technology capability using knowledge and skills from a wide range of other curriculum areas. This will be achieved through practical activities in which children investigate and make good quality products, fit for their intended purpose. Children will use the design process whereby ideas may be transformed into objects as they continually evaluate their work. They will also have the opportunity to disassemble, investigate and evaluate products. It is hoped that they will have enjoyable, practical, learning experiences. These aims are consistent with our school philosophy and take account of the LEA Guidance and the key learning skills for design and Technology (Appendix One)

## 3. Subject Statement

Design and technology prepare pupils to participate in tomorrow's rapidly changing technologies. They learn to think and intervene creatively to improve quality of life. The subject calls for pupils to become autonomous and creative problem solvers, as individuals and members of a team. They must look for needs, wants and opportunities and respond to them by developing a range of ideas and making products and systems. They combine practical skills with an understanding of aesthetics, social and environmental issues, function and industrial practices. As they do so, they reflect on and evaluate present and past design technology, its uses and effects. Through Design and Technology, all pupils can become discriminating and informed users of products and become innovators.

## 4. Teaching and Learning including Planning and Organisation

We plan the activities in Design and Technology so that they build upon the prior learning of the children. We give children of all abilities the opportunity to develop their skills, knowledge and understanding and we also build planned progression, so that the children are increasingly challenged as they move through the school. At Ryelands, progression documents which gives clear progression from Nursery to Year 6 in all elements of DT. (Progression in Design and Technology, Progression in DT Textiles, Progression in Mechanisms, Progression in Structures, Progression in Cooking and Nutrition)

### The Foundation Stage

Design and Technology in the Foundation Stage is an integral part of the continuous provision. We ensure that there is an emphasis on creative work in the nursery and reception class. We relate the creative development of the children to the objectives set out in the Statutory framework (Sept 21) which underpin the curriculum planning for children in the foundation stage.

**5. Curriculum Overview and Progression including visitors, trips and extra-curricular provision**

Subject planning:

- Design and Technology is a foundation subject in the National Curriculum. At Ryelands Primary School we use progression document which insure there is a clear progression in both skills and that DT 'topics' incorporate the three key elements of **Design/Make/Evaluate**, that we always consider the **Product/Purpose/User,** we know that the design process is not linear and that we follow an ***iterative*** approach (each element can be revisited several times in order to create the product that best fits the design brief, and we do not always need to create a 'finished' product, it can be a draft design/prototype – which can be 'talked' through with the user (appendix 1)

  Our medium-term plans give details of skills taught each term in relation to cross curricular planning and standalone DT topics. We plan the activities in Design and Technology so that they build upon the prior learning of the children. While we give children of all abilities opportunity to develop their skills, knowledge and understanding, we also build planned progression into their learning, so that there is an increasing challenge for the children as they move up through the school.

  Our Seed to Plate document (appendix 2) runs alongside the Progress in Food Technology The aim of this document is to ensure children have knowledge of the variety produce grown within the school grounds, to gain an understanding of the seasonality of the school ground produce available, to use the school grown produce within planned cooking and nutrition lessons where ever possible, to gain an understanding of the origins of sound of the food we eat and to notice the seasonal changes within growth process of produce.

**6. Assessment, Recording and Reporting**

Assessment is used to inform future planning and to provide information about individuals throughout their time in this school. Each term these assessments will be recorded on the Non-Core Assessment Spread sheets, which will record whether a child is working: above, at age related, on the year group but not met age related, below year group.

Assessment techniques will ensure that teachers assess the on-going design process and not just the finished products or outcomes. These techniques should include:-

- teachers' observation of pupils
- teacher – pupil discussion and teacher questioning
- pupils' drawings, notes, models, comments and written work
- artefacts made by pupils
- pupils' on-going analysis of their achievements
- photographs of children engaged in the design process
- use of ICT as appropriate.

When reviewing the children's progress in Design and Technology, teachers must consider children's:

- knowledge and understanding of materials and components
- understanding of mechanisms and ICT control
- ability to use materials and equipment safely
- ability to develop, plan and communicate design ideas
- interest and motivation in designing and making
- ability to appreciate and produce items of quality that meet its intended purpose.

Records of pupils' achievements are kept to:

- plan pupils' future learning
- report progress to parents
- maintain a written record of pupils' learning
- provide a curricular record for each pupil

**7. Inclusion including meeting the needs of SEN pupils and children entitled to PPG funding**

It is the responsibility of all teachers to ensure that all pupils, irrespective of gender, ability, including gifted pupils, ethnicity and social circumstance, have access to the curriculum and make the greatest progress possible.

Within Design and Technology, equal opportunities are an issue, which needs addressing by all teachers. This may necessitate careful consideration of groupings including at times single sex groupings when appropriate. Consideration of the technology of different cultures and times should be included.

**Special Educational Needs**

All pupils will have access to a broad, balanced curriculum, which includes Design and Technology, and have the opportunity to make the greatest progress possible. In particular Design and Technology offers the opportunity for children to achieve in a practical subject, as they are encouraged to communicate in different ways other than writing.

**8. Resources**

We have a wide range of resources to support the teaching of design and technology across the school. All our classrooms have a range of basic resources. A wide range of mark-making implements and more specialised equipment is stored in the central resource room.

**9. Professional development and training**

The subject leader attends local conferences and subject update courses when available and then reports back to school in staff training. The teachers are able to attend courses to update their subject knowledge and learn new and exciting ways to teach the topics.

**10. Health and Safety**

- Teachers will always teach the safe use of tools and equipment and insist upon good practice.
- Children will be taught to take steps to control risks.
- Glue guns will be used by Key stage 2 children under direct supervision, but only when there is no other appropriate joining technique.
- Children are taught how to follow proper food safety and hygiene rules.

**11. Roles and Responsibilities**

The teacher responsible for co-ordinating Design and Technology is Mrs Edwards and her role is described in her job description. This may include the following:

- plan work with teachers
- review and contribute to teacher planning
- prepare policy
- prepare a subject development plan
- provide consultancy, advice, skills
- in-class teaching support
- specifying and ordering resources in consultation with staff
- monitoring and maintaining condition and availability of resources
- monitoring and supporting teaching and learning in Design and Technology.

**12. Monitoring and Evaluation**

This policy for Design and Technology will be reviewed annually.

Evaluation should take into account:

- pupils' achievements
- coverage of programmes of study

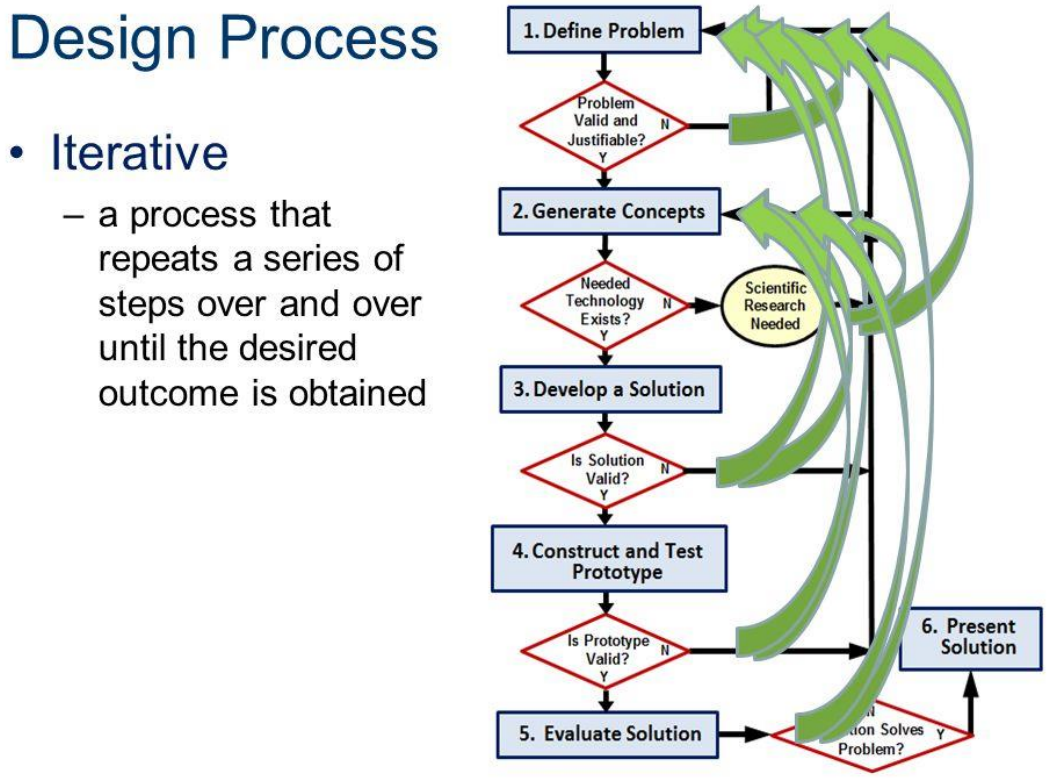
- analysis of teacher planning
- staff development
- classroom observation
- external inspection/advice

Appendix 1

**What is genuine D&T?**

Designing and making a **product** , for **somebody** (this can also apply to 'people substitutes' such as an animal and toy) and for **a particular purpose.** The design element should be to solve a problem. Ideally we should aim to solve real and relevant problems.

The process is not linear but ***iterative*****,** where each element can be revisited several times in order to create the product the best fits the design brief:




This process is not linear, they children should be encouraged to 'play' with their design until it works.
There are six D&T principles which make the iterative process work.

- Have the needs of the **user(s)** been identified and met (or has it been designed with no-one in mind)?
- Does it have a clear **purpose**?
- Have the **design decisions** been made?
- Would it **work/function** (or is it purely aesthetic/ornamental)?
- Is the product **innovative** (or doesn't it offer anything new/original/better)?
- Is it an **authentic** product?

Design

Give a design brief, which will allow the children to look at the bigger picture: what will it be used for, who will use it? During this stage children there could be time to evaluate existing products, to enable the children to understand how they work and what they might do.

Example: design an electrical system to indicate which shows when answers are correct/incorrect

- Where will it be located?  -on a shelf?
- Who will use it? – need to discuss with them as to what they want.
- Needs to be suitable/safe to use

Using the iterative approach

- Evaluate existing products- understand how they work and what they might do
- Teach key skills that children will need e.g. tech 3 different ways of making a switch – let the children decide

Consider could you make a 'draft design' / prototype which enables to design to be 'sold' to the user. This could be written or talked through with the 'purchaser'.

Appendix 2

**Ryelands Seed to Plate**

| | **This is what we all do…**<br>Have knowledge of the variety produce grown within the school grounds<br>Gain an understanding of the seasonality of the school ground produce available.<br>Use the school grown produce within planned cooking and nutrition lessons wherever possible<br>To gain an understanding of the origins of sound of the food we eat<br>To notice the seasonal changes within growth process of produce | | | | | | | |
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| | **Nursery** | **Reception** | **Year 1** | **Year 2 TBC** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
| School grown food to be harvested to be used in DT | | **Planting from seed to taste**<br>(Spring 1)<br><br>Including:<br>Potatoes<br>spring onions<br>carrots<br>Strawberries<br>Beans | **Picnic sandwiches**<br>(Summer 1)<br><br>Jam sandwiches:<br>Raspberries | **Coleslaw (Autumn 2)**<br><br>Including:<br>Carrot<br>Cabbage<br>Onion<br>Apple<br>Radish | **Vegetable stir-fry**<br>(Summer 2)<br><br>Including:<br>Beans<br>Broccoli<br>Carrots<br>Cauliflower<br>Kale<br>Spinach<br>Onions | **Quiche**<br>(Summer 2)<br><br>Including:<br>Spring Onions<br>Chives<br>Tomatoes<br>Spinach<br>Rocket | **Vegetable and potato soup**<br>(SUMMER 2)<br><br>Potatoes<br>With vegetables including:<br>Courgettes<br>Tomatoes<br>Onions<br>Cabbage<br>Garlic | **Chilli**<br>(Summer 2)<br><br>Beans<br>Chilli<br>Tomatoes<br>Onions<br>Peppers<br><br>**tortillas:**<br>make flour from sweetcorn |
| DT Links - Where food comes from | Adult lead discussion about where food comes from – look at the produce in the school grounds | Experiential learning: Planting from seed, Spring 1<br><br>(Reception growing plots) | Look at the fruit and vegetables grown in the school grounds, including raspberries. Watch how to make raspberry jam.<br><br>Plant lettuce and radish from seed, Spring 2<br><br>(KS1 tubs). | Grouping familiar foods available in the school grounds i.e. fruit/vegetables veg from bulbs / seeds<br><br>Plant onions, Summer 1<br>Plant radish Autumn 1<br><br>(Y2 veg plot) | To develop an understanding of food that is grown – look at the produce available within the school grounds Explore seasonality of vegetables and fruit.<br><br>Plant veg from seed / plugs (see list above) Summer 1<br><br>(Y3 veg plots) | To find out which fruit and veg are grown in our locality | To know food availability is affected by seasons – what & when produce is available to harvest within the school grounds<br><br>Plant sweetcorn, Summer 2<br><br>(UKS2 veg plots) | To have knowledge of how food is processed into ingredients that can be eaten or used in recipes.<br><br>Accessing the 'sharing shed dehydrator |