

Ripponden J&I School



DT Policy March 2020

Ripponden J & I School

Design and Technology Policy

INTENT

Introduction

This policy describes the current provision for Design and Technology at Ripponden J and I School, as defined in the National Curriculum 2014.

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 designing and making skills.

Aims

At Ripponden J and I School, our objectives in teaching DT 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 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.

Progression of Skills and Knowledge

The long-term plan for design technology ensures that our children will develop their skills and knowledge in this subject through a variety of different projects relating to other areas of the curriculum. There will be a design technology project planned for each term and skills should be built on each year so that children leave Ripponden J&I School with the skills and knowledge necessary for future design technology work in key stage 3, as well as a deeper knowledge of how the world around them works.

IMPLEMENTATION

Teaching and Learning

Ripponden uses a variety of teaching and learning styles in DT lessons. The principal aim is to develop children's knowledge, skills and understanding in the subject. Teachers ensure that children apply their knowledge and understanding when developing ideas, conducting research, during planning and making products and when evaluating them. This is done through a mixture of whole-class teaching and individual or group activities. Within lessons,

children are given the opportunity both to work on their own and to collaborate with others, listening to other children's ideas and treating these with respect. Children critically evaluate existing products, their own work and that of others. They have the opportunity to use a wide range of materials and resources, including computing hardware and software.

In all classes there are children of differing ability. This fact is recognised and suitable learning opportunities are provided for all children by matching the challenge of the task to the ability of the child. This is achieved through a range of strategies such as:

- setting common tasks that are open-ended and can have a variety of results;
- setting tasks of increasing difficulty where not all children complete all tasks;
- providing a range of challenges through the provision of different resources;
- grouping children by ability and setting different tasks for each group;
- using additional adults to support the work of individual children or small groups;
- providing support where individual children have particular gifts or talents.

The three projects during the school year can be taught when it suits the class teacher. They may choose to teach a unit over the course of four or five weeks or it may suit the teacher or class to complete the project during a week of consecutive lessons.

Planning

Design and Technology is a foundation subject in the National Curriculum and our planning is cross-curricular and linked to the specific curriculum of our school.

We carry out the curriculum planning in DT in three phases: long-term, medium-term and short-term. Our long-term plan maps out the themes covered in each term during the key stage. Our DT Subject Leader works this out in conjunction with teaching colleagues in each year group.

Our medium-term plans are planned by the class teacher. These list the specific learning objectives for each lesson and give an outline of the activities for each lesson. The class teacher keeps these individual plans, and they are shared with and discussed with the subject Leader. The DT Subject Leader is responsible for reviewing these plans.

Short term plans are for the class teacher only and will include more detail of individual lessons. They do not need to be shared with the subject Leader.

We plan the activities in DT 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 the scheme of work, so that there is an increasing challenge for the children as they move up through the school.

It is important that children's success in DT is acknowledged and celebrated appropriately. This will be done through display in classrooms and around school.

Early Years Foundation Stage

At Ripponden J and I School we encourage the development of skills, knowledge and understanding that help children make sense of their world. We relate this development to the objectives set out in the "Early Years Foundation Stage" (Development Matters), 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.

Resources

Our school has a range of resources to support the teaching of DT across the school. Classrooms have a range of basic resources, with the more specialised equipment being kept in **?????**. There is a large range of shared cooking equipment in the ICT Room cupboard. **?????**

Inclusion

At our school we teach DT to all children, whatever their ability and individual needs. DT implements the school curriculum policy of providing a broad and balanced education to all children. Through our DT teaching we provide learning opportunities that enable all pupils to make progress. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talents, and those learning English as an additional language, and we take all reasonable steps to achieve this. Support staff should be used to help children who require extra support with this subject and teachers should bare this in mind when planning to support these children.

Links with other areas of the Curriculum

Literacy

DT contributes to the teaching of Literacy 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 DT. 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.

Numeracy

In DT, 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 DT, looking at and drawing electrical circuits. It also helps children to think about using materials to create structures which can withstand a force.

Computing

Computing enhances the teaching of DT, 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 a program to control mechanisms and to get them to move in different ways, either in a virtual world or via an infrared connection to working models. The children also collect information and present their designs through a range of design and presentation software.

Personal, Social and Emotional Education (PSHE)

DT 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.

Learning Beyond the Classroom and Parental Involvement

Children should be encouraged to conduct research at home to further extend their knowledge. For example, in year six children could investigate how toys in their own homes light up as research for their working lighthouses project. They should also be encouraged to

be inquisitive about how things work in the world around them. Parents should be involved with this learning as much as possible.

Health and Safety

In this subject the general teaching requirement for health and safety applies. We teach children how to follow proper procedures for food safety and hygiene. It is the responsibility of the Subject Leader to pass on any relevant Health and Safety information to staff. It is the individual member of staff's responsibility to ensure that they have read, understood and act on this information

Role of the Subject Leader

The role of the Subject Leader is to:

- advise and support staff in planning teaching and learning of DT;
- formulate and carry out an action plan on a yearly basis;
- update the school's policy and Scheme of Work;
- support staff with technique;
- identify and order appropriate resources and monitor and maintain their condition and availability;
- report to the Governing body;
- monitor teachers' planning as part of on-going subject monitoring and evaluation of practice;
- compile a portfolio of children's art work to evidence progression and examples of good practice for staff to refer to;
- keep up-to-date on the use of DT in the curriculum and update staff accordingly;
- promote DT throughout the school eg. displays.

IMPACT

Marking, Assessment, Recording and Reporting

Children's research, planning, making and evaluating should all be marked and feedback given in accordance with the marking policy of the school. Depending on the age of the children, feedback may be given in different ways eg. sometimes verbally and sometimes written.

Teachers assess children's work in DT by making assessments as they observe them working during lessons, allowing for different learning styles. They record the progress that children make by assessing the children's work against the learning objectives for the lessons. Children are encouraged to make judgements on ways in which their work can be improved. These assessments will then be used to judge pupils' level of attainment and progress against DT "milestones" which exemplify expectations at the end of Year 2, Year 4 and Year 6 and will inform an annual assessment of progress for each child, as part of the report to parents. Each teacher passes this information on to the next teacher at the end of each year. During the Foundation Stage children will be assessed as part of Understanding the World against the development matters statements and early learning goals.

The Subject Leader keeps evidence of the children's work in a portfolio. This demonstrates the expected level of achievement in DT in each year of the school. The monitoring of the standards of children's work and of the quality of teaching in DT is the responsibility of the Design and Technology Subject Leader.

Review and Evaluation

Date of Ratification:		Signed: Mrs Lorraine Bamforth (HEAD TEACHER) Mr Stephen Fisher (CHAIR OF GOVERNORS)
Review date:		Signed: Mrs Lorraine Bamforth (HEAD TEACHER) Mr Stephen Fisher (CHAIR OF GOVERNORS)