

Design and Technology Policy.

Love Jesus, Love Learning, Love Each Other.

Inclusion.

As a school we ensure that all children and staff are treated fairly and equally. All children have equal rights to access all areas of the curriculum, regardless of race, gender and disability. Within this subject area, the SMT and all staff endeavour to provide the appropriate provision for this to occur. This policy follows the guidelines and practices that are stated and outlined in St. Oswald's Equality Scheme

Aims and Objectives.

The aim of design and Technology teaching here at St Oswald's Catholic primary School is to prepare children to participate in the development of tomorrow's rapidly changing world and to help them develop a curiosity and interest within it. The subject encourages the children to think creatively and become imaginative problem solvers both as individuals and as members of a team. It allows them to identify requirements and gives them opportunities to develop ideas and designs through learning skills and eventually making products and systems. Through the study of Design and technology they combine practical skills with their knowledge and understanding to advise a solution, use their skills to realise it and then evaluate both the end product and decisions taken during the whole process. Design and technology can motivate pupils and promote self esteem and confidence in all pupils including those with special needs.

The aims of Design and Technology are:

- ◆ To create an interest and enthusiasm for designing and making for children of all abilities and develop these skills.
- ◆ To develop children's confidence and skill in using and selecting a range of tools and materials safely.
- ◆ To develop their knowledge and understanding and combine these with their design and making skills in order to develop their capability in creating high quality products.
- ◆ To develop an understanding of technological processes, products and their manufacture and their contribution to our society.

- ◆ To help children develop an ability to criticise constructively and evaluate their own products and those of others.

Content

In Design and Technology children acquire and apply knowledge and understanding of:

- materials and components;
- mechanisms and control systems;
- structures;
- existing products;
- quality;
- Health and safety.

Teaching and learning styles.

As a school we decided that the teaching of Design and Technology would be conducted throughout the school year as part of the Topic's being covered by each year group. There will also be a focused Design and Technology afternoon during the second part of the Autumn term. The school aims to use a variety of teaching and learning styles during the teaching of design and technology. Throughout our teaching we aim to develop the children's knowledge, understanding and practical skills, in addition, the basic skills in Literacy, Numeracy, Science and ICT will also be taught and developed through Design technology. Teachers encourage the children to apply their knowledge and understanding when developing ideas, planning and making products and then evaluating them. This is done through whole class teaching and individual/ group activities incorporating the three types of activity through which children can develop their knowledge, skills and techniques:

- design and make assignments;
- focused practical tasks;
- investigating, disassembling and evaluating activities.

These activities are used alongside each other and can complement each other. They also have the opportunity to use a wide range of materials and resources, including ICT.

We understand that in all classes there are children of differing abilities and recognise the need to provide suitable learning opportunities that encourage full and active participation by all children irrespective of their ability. Individual teachers are best placed to judge which children might need particular support and guidance in order to achieve success in their designing

and making, the necessary help and encouragement will be provided with this in mind.

Design and Technology Planning.

Design and Technology is a foundation subject in the National Curriculum and as a school we choose to use the Chris Quigley - Key Skills for an Excellent and Enjoyable Curriculum as a basis for our curriculum planning to support the National Curriculum programmes of study in design and technology. We carry out the curriculum planning in three phases:

Long Term planning:- This is covered through the long term planning for Topic work for all key stages. These are planned in such a way that they build upon the prior learning of the children so as to suitably challenge children as they move through the school.

Medium planning:- These are weekly key questions based on the topic and design technology is built into them. There are QCA and LCP documents in school for teachers to refer to if needed for specific skills. They include learning objectives and outcomes, possible teaching objectives and expectations for at the end of each unit.

Short term planning:- This is done by the class teacher who completes daily plans for the current Topic which will include design and technology objectives, assessments and details of how the lessons are to be taught.

Recording and Assessing.

Teachers assess children's work by making assessments as they observe them working during the lessons. Their progress will be recorded against the learning objectives of the lesson. At the end of each topic teachers will make judgements using the Chris Quigley Key Skills to assess the level of the pupil. In the foundation stage teachers are continually making assessments both informally and formally to help them make informed judgements related to the profile assessments which need to be completed throughout the year. Further information can be found in the Curriculum file under Design Technology assessment.

Reporting.

Reporting pupil's progress to parents will be done by providing the opportunity for parents to look at the children's design and technology workbooks at the

end of each school year along with a full written report. Parents will also be informed of the units their children will be completing during the year.

The Foundation Stage.

We encourage the development of skills, knowledge and understanding that help children to make sense of the world around them and we relate their development to the objectives set out in the Early Years Goals. A range of early experiences are planned and include asking questions about how things work, investigating and using construction kits, materials, tools and products, developing making skills and handling appropriate tools and construction materials safely and with increasing control. These encourage exploration, observation and problem solving and these activities are conducted both indoor and out door to attract the children's curiosity and interest. This learning forms the foundations for later work in design and technology.

Expectations.

Broad issues of progression can be expressed as expectations for each key stage. The following expectations are set out in maintaining breadth and balance at key stage 1 and key stage 2.

By the end of key stage 1 children will be able to:-

- ◆ use a range of materials to design and make simple products;
- ◆ select materials, tools and techniques and explain their choices;
- ◆ understand simple mechanisms and structures;
- ◆ measure, assemble, join and combine materials in a variety of ways using basic tools safely;
- ◆ investigate and evaluate simple products commenting on main features.

By the end of key stage 2 children will be able to:-

- ◆ use knowledge and understanding of a range of materials, components and techniques to design and make quality products;
- ◆ evaluate work as it develops and if necessary, suggest alternatives;
- ◆ produce designs and plans which list the stages involved in making a product and list tools and materials used;
- ◆ accurately measure, mark, cut, join and combine a variety of materials, working safely and recognising hazards to themselves and others;
- ◆ understand the use of electrical and mechanical systems and more complex structures;
- ◆ evaluate what is or is not working well in a product.

Resources.

Classrooms have a range of basic resources, with more specialised equipment being kept in the design and technology room. (This room is only accessible to staff and prefects.) It will be up to the subject leader to review the position and organisation of resources and will be responsible for updating and reviewing their replacement when necessary and considering further purchasing to meet future needs.

Equal Opportunities.

We believe that all children should be able to experience a range of design and technology activities irrespective of age, gender or ability.

Health and Safety.

All activities connected with the teaching of design and technology will comply with the school guidelines relating to Health and Safety. In general teachers will always teach the safe and proper use of tools and equipment and insist on good practice at all times. Children will be taught to take responsibility in the tidying away of equipment. Glue guns may be used by key stage 2 children under the direct supervision of the class teacher. Craft knives and cutting knives again may be used by upper key stage 2 children under supervision of the class teacher. Younger pupils may tell the teacher what they require and the teacher carries out the cutting task with the child. When food is needed it will be ordered through the kitchen manager for the date required and used on that day. Teachers and support staff will have the responsibility of ensuring the tools; tables etc are clean before use. Groups of children may then be involved in clearing away under supervision from the teacher. Plastic aprons must be worn by the teacher, support staff and children and plastic covers must be placed over the tables being used. Children will be taught to always follow strict hygiene procedures.

Role of the Co-ordinator.

- ◆ Lead the development of design and technology in the school;

- ◆ Provide guidance to individual members of staff when needed;
- ◆ Regularly update staff on new tools, materials etc;
- ◆ Collect samples of children's work for the evidence file and take photographs of displays and children's finished products;
- ◆ Periodically submit a resources audit and be responsible for the organisation, upkeep and ordering of resources.

Reviewed Sept 2015