

Design & Technology Policy

Date of policy - September 2017

#### Mission Statement

In this distinctive, inclusive, Christian school, where everyone matters, we nurture and develop opportunities for life long learning. We come together in a vibrant, creative community that also develops our spiritual and cultural lives through:

- Love
- Trust
- Care
- Respect
- Joy

ensuring that everyone successfully achieves their full potential.

## Aims and objectives

Design and technology prepares children to take part in the development of tomorrow's rapidly changing world. Creative thinking encourages children to make positive changes to their quality of life. The subject encourages children to become autonomous and creative problem solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas and eventually making products and systems. Through the study of design and technology they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industrial practices. This allows them to reflect on and evaluate present and past design and technology, its uses and its impacts. Design and technology helps all children to become discriminating and informed consumers and potential innovators.

The aims of design and technology are:

- To develop imaginative thinking in children and enable them to talk about what they like and dislike when designing and making.
- To enable children to talk about how things work and to draw and model their ideas;
- To encourage children to select appropriate tools and techniques for making a product, whilst following safe procedures;
- To explore attitudes towards the made world and how we live and work within it;
- To develop an understanding of the technological process, products and their manufacture, and their contribution to our society;
- To foster enjoyment, satisfaction and purpose in designing and making.

# Teaching and Learning Styles

A variety of teaching and learning styles are used in design and technology lessons. Our aim is to develop the children's knowledge, skills and understanding in design and

technology. We ensure that the children apply their knowledge and understanding when developing ideas, planning and making products and evaluating them. The teachers will provide a mixture of whole class teaching and individual/group activities. Teachers will draw attention to good examples of individuals work as models for the other children. We will encourage the children to evaluate their own ideas/work and the work of others, and say what they think and feel about them. Within lesson we give children the opportunity to work on their own and collaborate with others. Children also have the opportunity to use a wide range of materials and resources, including ICT.

In all classes there are children of differing ability. We recognize this fact and 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 have a variety of results;
- Setting tasks of increasing difficulty where not all children complete all tasks:
- Grouping children by ability and setting different targets for each group;
- Providing a range of challenges through the provision of different resources;
- Using additional adults to support the work of individual children or small groups.

# Curriculum Planning

Design and technology is delivered through cross curricular topics designed to give coherence and context, coving the breadth of study for art and design as stated in the National Curriculum. Here at St Peter's, we have developed a progressive skills based curriculum based upon the National Curriculum Programmes of study.

Skills are divided into;

- Design
- Make
- Evaluate
- Technical knowledge
- Cooking and Nutrition

We carry out curriculum planning in art and design in two phases (long term and medium term). The long term plan maps the design and technology units covered in each term throughout each key stage and ensures an appropriate balance and distribution of work. The design and technology subject leader works this plan out in conjunction with teaching colleagues in each year group.

Our medium term plans give details of the topic theme for each term. We identify the specific learning objectives in the guise of big questions and detail how the lessons are to be taught, differentiation as necessary, the skills to be taught alongside levels, learning outcomes and cross-curricular links for each topic as well as the provision for 'Gifted and Talented' pupils, the initial 'hook' and 'end of topic 'celebration'. The design and technology subject leader reviews these plans on a regular basis. Because we have some mixed age classes some medium term planning is organised on a two year cycle. By

doing so, we ensure that children have complete coverage of the National curriculum but do not have to repeat topics.

## Foundation Stage

We encourage the development of skills, knowledge and understanding that help reception children make sense of their world as an integral part of the school's work. We relate the development of the children's knowledge and understanding of the world to the Early Learning Goals as set out in the EYFS Curriculum. These underpin curriculum planning for children from birth to five years. 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 with increasing control.

## Contribution of art and design to teaching in other curriculum areas:

## Literacy

At St Peter's Design and technology contributes to the teaching of literacy by providing valuable opportunities to reinforce what the children have been doing during their literacy lesson. Discussion, drama and role play are important ways that we employ 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. They also have opportunities to write instructions and evaluate the products that they are researching or creating.

#### Mathematics

Design and technology contributes to the teaching of mathematics by giving opportunities to develop the children's understanding of shape and space through work in two and three dimensions.

# Information and communication technology (ICT)

We use ICT to support design and technology teaching when appropriate. Children use software to enhance their skills in designing and making, and use draw and paint programs to model ideas and make repeating patterns. They use data bases to provide a range of information sources, CD ROM and the internet to gain access to images of people and environments. We also work in partnership with the local e-learning centres.

## Personal, social and health education (PSHE) and citizenship

Design and Technology contributes to the teaching of some elements of personal, social and health education and citizenship. We encourage the children to develop a sense of education and citizenship. We encourage the 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 be responsible and to set targets to meet deadlines, and they also learn through their understanding of personal hygiene, how to prevent germs from spreading when working with food.

## Spiritual, moral, social and cultural development

The teaching of design and technology offers opportunities to support the social development of our children through the way we expect them to work with each other in lessons. Groupings allow the children to work together and give them the chance to discuss their ideas and feelings about their own work and the work of others. Their work in general helps them to develop a respect for the abilities of others and encourages them to collaborate and co-operate across a range of activities and experiences. The children learn to respect and work with each other and with adults, thus developing a better understanding of themselves. They also develop a respect for the environment, for their own health and safety and that of others. They develop their cultural awareness, looking at designs and artifacts from other cultures, and understanding and learning to appreciate the value of differences and similarities. A variety of experiences teaches them to appreciate that all people are equally important, and that the needs of individuals are not the same as the needs of groups.

## Teaching design and technology to children with special educational needs:

At our school we teach design and technology to all children, whatever their ability. Design & Technology forms part of the school curriculum policy to provide a broad and balanced education to all children. Through our design and technology teaching we provide learning opportunities that enables all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's different needs. Assessment against the key skills 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 education needs. Our assessment process looks at a range of factors- classroom organization, teaching materials, teaching style, differentiation- so that we can take some additional or different action to enable the child to learn more effectively. This ensures that our teaching is match to the child's needs.

Intervention through School Action and School Action Plus will lead to the creation of an Individual Education Plan (IEP) for children with special Educational needs. The IEP may include, as appropriate, specific targets relating to design and technology.

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

## Assessment and Recording

We assess children's work in Design & Technology using the assessment procedures as identified in our assessment and monitoring policies. Informal judgments are made as we observe children during lessons. On completion of a piece of work, the teacher marks the work and comments as necessary. At the end of the each term the teacher will assess each child on the key skills taught. These are then recorded on appropriate assessment sheet and passed to the subject leader as part of the monitoring process. An end of year judgement is recorded for every child each year to track progress through the school.

#### Resources

We have a wide range of resources in school to support the teaching of design and technology across the school. A range of basic resources and more specialist equipment is stored in the art and DT store cupboard. This room is accessible to adults only. The food technology equipment is kept in the labeled cupboards in the hall. ICT programs and the internet are also used. The resources are of good quality and are replaced as and when necessary.

## Health and Safety

The general teaching requirement for health and safety applies to this subject. We teach the children how to follow proper procedures for food safety and hygiene. Risk assessments are carried out for the use of specialist tools which might pose a hazard.

# Monitoring and Review

The monitoring of the standards of children's work and the quality of teaching in design and technology is the responsibility of the design and technology subject leader. The work of the subject leader involves supporting colleagues in the teaching of design and technology, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. The design and technology

subject leader gives the head teacher an annual report in which s/he evaluates the strengths and weaknesses in the subject and indicates areas for further improvements.

The governing body will review this policy every three years. However it may be reviewed earlier if new government regulations are introduced, or if the governing body receives recommendations on how the policy might be improved.

Signed	:	Date:

Review due: July 2020