Hindley J and I School

Design and Technology Policy

Written: July 2014

To be renewed: July2017

_____Signed on behalf of the school _____date

_____Signed on behalf of the governors ____date

1. AIMS

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 of 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 informed consumers and potential innovators.

2. OBJECTIVES

- To develop imaginative thinking in children and to enable them to talk about what they like and dislike when designing and making things;
- 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 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 technological processes and products, their manufacture and their contribution to our society;
- To foster enjoyment, satisfaction and purpose in designing and making things.

3. Teaching

The school uses a variety of teaching and learning styles in design and technology lessons. The principal aim is to develop children's knowledge, skills and understanding in design and technology. Teachers ensure that the children apply their knowledge and understanding when developing ideas, planning and making products, and then evaluating them. We do this through a mixture of whole-class teaching and individual or group activities. Within lessons, we give children 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 ICT.

4. Curriculum

- The New National Curriculum yearly objectives are being planned and taught for by staff within school and assessments are carried out once termly by all members of staff and children are assessed against their year group expectations.
- Design Technology is planned for with the half termly Learning Challenge planning format as an enhancement towards learning or through a mini topic of its own.
- Teachers highlight objectives on their year group trackers to show when objectives have been achieved.
- Class teachers plan for Design and Technology using the school planning format and clearly state learning objectives and steps to success as and where appropriate.
- Children's work is assessed by the class teacher and through peer discussions following the process of plan, design, create, evaluate.
- We plan the activities in design and technology so that children can build upon their prior learning. We give children of all abilities the opportunity to develop their skills, knowledge and understanding, and the yearly objectives show planned progression, so that the children are increasingly challenged as they move through the school.

5. Early Years 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. As the reception class is part of the Foundation Stage of the National Curriculum, we relate the development of the children's knowledge and understanding of the world to the objectives set out in the Early Learning Goals. These underpin the curriculum planning for children aged three 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 material safely and with increasing control.
- We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking and discussion. These activities, indoors and outdoors, attract the children's interest and curiosity.

6. Design Technology and the other areas of the curriculum

Numeracy

- In design and technology there are many opportunities for children to apply their mathematical skills through choosing and using appropriate ways of calculating measurements and distances. They learn how to check the results of calculations for reasonableness, and learn how to use an appropriate degree of accuracy for different contexts. Children learn to measure and use equipment correctly. They apply their knowledge of fractions and percentages to describe quantities and calculate proportions.
- The children will carry out investigations and in doing so they will learn to read and interpret scales, collect and present data, and draw their own conclusions. They will learn about size and shape, and make practical use of their mathematical knowledge, in order to be creative and practical in their designs and modelling.

PSHE and Citizenship

- Design and technology contributes to the teaching of personal, social and health 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 disease 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. Our groupings allow children to work together, and give them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and cooperative work across a range of activities and experiences in design and technology, the children develop respect for the abilities of other children, and a better understanding of themselves. They also develop a respect for the environment, for their own health and safety, and for that of others. They develop their cultural awareness and understanding, and they learn 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.

ICT

- Information and communication technology enhances the teaching of design and technology, wherever appropriate, in all key stages. Children use software to enhance their skills in designing and making things. The children also use ICT to collect information and to present their designs through a range of design and presentation software.

7. Resources

School has a wide range of resources and is replenished by the Subject leader. All resources are stored in the Key Stage 2 resource room.

8. Health and Safety

Children are taught about food hygiene and safety procedures through Design and Technology lessons.

9. Monitoring and Review

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. The work of the subject leader also involves supporting colleagues in their teaching, being informed about current developments in Design and Technology, and providing a strategic lead and direction for this subject in the school. The subject leader reviews and evaluates the action plan, budget and planning annually.