MICKLEOVER PRIMARY SCHOOL

Name of Policy: Design & Technology

Date of Policy: June 2018

Member of Staff responsible: R. Fox

Review date: June 2021

Signature: _____ **Chair of Governors**

Date Approved: _____

At Mickleover Primary School

We are:

Motivated to learn

Proud of our achievements

Successful and skilled for life

Design & Technology Policy

Technology is largely a practical subject, where investigating existing products, understanding the design criteria, making decisions about what to design and how to make it, are as important as the finished product.

Design technology is a subject in its own right and has specific skills and knowledge, which need to be taught and learnt. Once learnt, these skills can be applied to the solution of problems and can be used to support work in other subjects; such as science, maths and art.

Our work now follows the Design and Technology Progression Framework from the 2014 National Curriculum

> *Design Technology prepares 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 technology, all pupils can become discriminating and informed users of products, and become innovators.*
>
> ***Pupils should be taught to develop their design and technology capability through combining their designing and making skills with knowledge and understanding, in order to design and make products.***

AIMS

- For the children to develop an understanding of the purposes and applications of Design Technology in everyday life.
- For the children to learn the necessary skills to develop their level of achievement in Design Technology.
- For the children to be able to discuss their design technology using relevant and appropriate vocabulary.
- For the children to learn and apply good Health and Safety attitudes and practises.
- To motivate the children by providing interesting and stimulating experiences.
- To enable the children to use Design Technology to solve a range of problems.

OBJECTIVES

The children should be able to:

- Investigate, disassemble and evaluate existing products; considering their purpose, practicality and potential improvements to the design.
- Design and make products based on a given design criteria, using knowledge from evaluations and their own experiences of similar products to further their technological abilities.
- Communicate ideas in a variety of ways, researching and recording relevant information where appropriate.
- Constructively evaluate their own and others' work; suggesting improvements that could be made.
- Use the correct vocabulary when discussing their work.
- Choose appropriate materials for their task and use these as economically as possible.
- Work co-operatively with others in teams, groups and pairs.
- Organise their work areas and gather required resources, be able and willing to tidy up after themselves.
- Know that all food comes from plants or animals.
- That food has to be farmed, grown elsewhere (e.g home) or caught , in the UK and the wider world.
- How to name and sort foods into the five groups in the Eatwell plate.
- That everyone should eat at least 5 portions of fruit and vegetables every day.
- How to prepare simple dishes safely and hygienically, with (KS2) and without (KS1), using a heat source.
- How to use techniques such as cutting, peeling and grating.

TEACHING AND LEARNING

To maximise learning in Design Technology children need to be given opportunities to handle and manipulate products and tools, in order to develop a deeper understanding of what they are learning. Children should be given opportunities to learn through whole class teaching, individual and group work. Their learning should include investigative, disassembly and evaluative activities, focused practical tasks, design and make assignments, and evaluations of what they feel they have achieved.

PLANNING

Planning is based on the Design and Technology Progression Framework from the 2014 National Curriculum with units being adapted to complement topic themes and a creative curriculum in each year group. Design Technology work is integrated into the whole school topic planning grid. Both Key Stage 1 (KS1) and Key Stage 2 (KS2) carry out work on a yearly cycle. Each year group works on three specific Design Technology projects each year. Each project is planned for in medium term planning grids.

Teachers should refer to the Progression Framework when planning and can supplement this with resources from the Design and Technology Association (DATA), such as skills help sheets and lesson plans. Teachers should not see the ideas and suggestions from the Framework as being prescriptive and are encouraged to develop their own ideas, within the aims and objectives of each unit, as appropriate to the age range and what is being taught in other areas of the curriculum, to develop cross curricular links.

Planning should take into consideration different learning styles and provide opportunities for the children to maximise their learning opportunities. Planning should show differentiation of activities to match the differing abilities of children and should ensure progression of skills, concepts and techniques.

EQUAL OPPORTUNITIES

It is the policy of Mickleover Primary School to ensure that every child receives an equal opportunity within Design Technology activities, regardless of race, gender, ability or Special Educational Needs.

SPECIAL NEEDS

Any children who are identified as having 'special needs' are given the help that they require to enable them to access the design technology curriculum. Where children have a degree of physical, sensory or behavioural difficulties in the making of products, they should be encouraged to participate in Design Technology activities with help from others.

GIFTED AND TALENTED

Staff must ensure that there are adequate opportunities for Gifted and Talented children and these should be noted within planning where appropriate. The DT and Gifted and Talented coordinators should be informed. Pupils who are Gifted and Talented within DT are offered the same curriculum as all other children however they may work on activities at an extended level, using support staff and the Gifted and Talented co-ordinator to give extra guidance where appropriate.

ASSESSMENT, RECORDING AND REPORTING

There is no statutory requirement for formal assessment of each strand of Design Technology to take place, however teacher assessment is used to inform future planning and to review children's progress. Specific skills are to be assessed in accordance to the 2014 curriculum and individual names recorded as those exceeding expectations and those who have not meet expectations on assessment grids. Any names not recorded on grids are at expected level. These levels are then entered onto the school progress tracker in July and results to be reported to governors and annotated onto SIP. Design Technology assignments are used throughout the school to assist teachers in making formative and summative assessments.

Children are encouraged to make oral or written evaluation of their work in Design Technology, where appropriate children will use design sheets or booklets to plan, record, assess and evaluate their work. Teachers are expected to record observations of children's progress and where possible evidence will be kept in the form of children's written work, finished products or photographs.

Parents receive written information about children's learning and progress in Design Technology as part of their child's end of year report.

RESOURCES

The school has a range of resources for use in Design Technology, which are developed and added to inline with developments within the curriculum area. As well as practical resources and tools there are teacher and children's reference books. There is a central store of materials and equipment, which for health and safety reasons only staff may access.

It is the responsibility of all staff to keep the central store tidy and organised.

HEALTH AND SAFETY

At all times children and adults must work within the Health and Safety guidelines. This is particularly the case when completing Food Technology tasks using equipment such as microwaves, ovens, blenders and toasters. All staff are asked to refer to / complete if necessary a Risk Assessment (accessed via the server- Risk Assessments/School Risk Assessments/DT) before completing such activities. Staff are also asked to consider the age of the children and the level of adult supervision felt necessary during activities involving DT hand tools e.g. saws, drills, glue guns, knives. The DT coordinator suggests work stations for sawing, hammering – so that children are not carrying various tools around the classroom and adult supervision can be pin pointed to certain areas of the classroom. A set of safety guidelines for Design and technology can be found in the Design Technology store and on the Design Technology teacher's resource shelf. Staff can also access guidelines relating to health and safety issues pertinent to Design and Technology within the school's Risk Assessment folder (accessed via the server).

ROLE OF THE CURRICULUM LEADER

The curriculum leader for Design Technology works with the whole school staff to develop a cohesive Design Technology experience throughout the school.

The curriculum leader will also:

- Support colleagues in their development and understanding of detailed work plans and implementation of the scheme of work and in assessment and record keeping.
- Take responsibility for the purchase and organisation of resources for Design Technology, taking into account cost effectiveness.
- Keep up to date with developments in Design Technology and attend curriculum leader meetings provided by the Local Education Authority.
- Monitor the planning, delivery and assessment of Design Technology throughout the school.