Design and Technology

"Some of the best inventive moments are born out of 'wrong thinking'. The wrong way will lead to mistakes from which you can learn and create new discoveries-the kind of original ideas that come to life when we dare to be different, keep an open mind, and have no fear of failure."

James Dyson

Local context

Long Lane Primary is a Community Primary School, built in 1966 and maintained by West Berkshire Council. There are links with Pangbourne College, with opportunities for KS2 children to visit for a 'DT day.' In the local area there are links to the great engineer, Isambard Kingdom Brunel with the Great Western Railway and the Tilehurst Road Bridge.

Intent

At Long Lane Primary School we aim to equip children for independence and intend to build a Design Technology curriculum which inspires creative, critical thinking, enabling children to develop the skills needed to carry out practical tasks and to problem-solve with confidence and ***curiosity***. Our aim is for children to be able to design products for a range of users and to critically evaluate their projects against success criteria. As part of the DT curriculum, we also aim for children to develop an understanding of nutrition and to learn basic skills in food preparation and cooking to serve themselves and their ***community***.

We intend for all children to acquire appropriate subject knowledge, skills and understanding as set out in the National Curriculum.

(Please see Curriculum Policy.docx for details of Cultural Capital at Long Lane)

Implementation

At Long Lane, our implementation of the DT curriculum will be through:

- A well thought out, whole school, yearly overview of the curriculum which plans for progression across year groups in all areas of DT (textiles, mechanisms, structures, food and electrical systems)
- Well planned and resourced projects providing children with a hands-on and enriching experience
- A range of skills being taught, ensuring that children are aware of the health and safety issues relating to the tasks undertaken
- Teachers being given ownership of planning, and the flexibility to teach units of DT in such a way as to maximise the opportunity for children to be immersed, inventive and reflective in their work.

Each project from Year 1 to Year 6 will address the principles of designing, making, and evaluating whilst incorporating relevant technical knowledge and understanding in specified contexts. Key concepts will be taught in each Key Stage.

Children will be introduced to specific designers, chefs, nutritionists, etc. helping to engender an appreciation of human creativity and achievement and increase the cultural capital from which they can draw in the future.

It is our aim to create strong cross curricular links with other subjects, such as Mathematics, Science, Computing, and Art. We want Design and Technology to prepare our children, to give them the opportunities, responsibilities, and experiences they need to be successful in later life.

Early Years Foundation Stage

During the EYFS, pupils explore and use a variety of media and materials through a combination of child initiated and adult led activities. They will have the opportunities to learn to:

- Use different media and materials to express their own ideas
- Make plans and construct with a purpose in mind using a variety of resources, adapting their work where necessary
- Develop skills to use simple tools and techniques appropriately, effectively and safely
- Cook and prepare food adhering to good health and hygiene routines

(Please see Teaching for Learning Policy 2023.docx for details of Learning Behaviours, inclusion and Rosenshine Principles at Long Lane)

Impact

Through their engagement with our DT curriculum, children will be able to:

- Use what they have learnt about media and materials in original ways, thinking about form, function and purpose
- Design and plan a project, taking inspiration from a range of designers
- Choose and use a range of materials, considering which is best for their intended purpose
- Develop skills to use simple tools and techniques appropriately, effectively and safely
- Evaluate and adapt their work where necessary
- Cook and prepare food adhering to good health and hygiene routines

This creative thinking and resulting skills and learning behaviours will be applied to other areas of the curriculum, enabling confident, independent problem solving.

Pupil assessment and attainment

Pupil's skills and knowledge are assessed by the class teacher and DT coordinator through observation, work scrutiny, thoughtful questioning and pupil voice. Summative assessment will be through mini-quizzes and end of project assessment against success criteria.

Teachers use **Assessment for Learning** strategies to ensure that children understand what they are being taught within a context and 'know more and remember more' of the key knowledge and skills outlined in each objective. These will include; mini quizzes, questioning, discussions and observations (including video and photography), peer assessment and appreciation, Think Pair Share, book looks and comparisons. Teacher assessment occurs throughout teaching and learning with support implemented where appropriate. (see Teaching for Learning Policy linked below)

EYFS pupils' progress and attainment is assessed by the FS class teacher in the context of the EYFS framework and ELGs.

Monitoring and School Improvement Planning

The DT Lead, the Headteacher, with support from the Governors regularly review and quality assure DT across the school to ensure that it is implemented sufficiently well in line with the National Curriculum Objectives and aligns with the Vision and Values of the school.

Impact is measured through monitoring activities, including; learning walks, questionnaires to staff, pupil voice, looking at evidence of pupil's work, teacher's assessments and any other relevant evidence. In addition, they evaluate the impact and plans for future development of the subject for pupils and staff, utilising action plans, looking to develop new opportunities, refine current practice, plan CPD for staff and feed into the School Improvement Plan (where appropriate) from where Performance Management and school priorities stem.

Linked Policies – This policy sits under the following two umbrella policies;

Teaching for Learning Policy 2023.docx

Curriculum Policy.docx