Design Technology Policy

Reviewed Oct 2024

Policy Approved by: _____

At meeting on: _____

Design Technology Policy

School Vision

"***We shine like stars to achieve and make a difference in the world, knowing that with God, all things are possible.***"

Purpose of study

> *Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.*

Intent

At Aspull Church Primary School, we intend that children should master Design and Technology to such an extent that they can go on to have careers within Design and Technology and make use of design and technology effectively in their everyday lives. Our children will be taught Design and Technology in a way that ensures progression of skills, and follows a sequence to build on previous learning. Our children will gain experience and skills of a wide range of formal elements of design and concepts of technology in a way that will enhance their learning opportunities, enabling them to use design and technology across a range of subjects to be creative and solve problems, ensuring they make progress.

Implementation

We follow a broad and balanced Design and Technology curriculum that builds on previous learning and provides both support and challenge for learners. We use Kapow Primary resource scheme that ensures and progression of skills and covers all aspects of the Design and Technology curriculum.
All classes will have a scheduled Design and Technology unit to cover each term.
We want to ensure that Design and Technology is embedded in our whole school curriculum and that opportunities for enhancing learning by using design and technology are always taken.

Impact

Our children enjoy and value Design and Technology and know why they are doing things, not just how. Children will understand and appreciate the value of Design and Technology in the context of their personal wellbeing and the creative and cultural industries and their many career opportunities.

Progress in Design and Technology is demonstrated through regularly reviewing and scrutinising children's work, in accordance with our Design and Technology assessment policy to ensure that progression of skills is taking place. Namely through:

- Looking at pupils' work, especially over time as they gain skills and knowledge
- Observing how they perform in lessons
- Talking to them about what they know.

The Design and Technology curriculum will contribute to children's personal development in creativity, independence, judgement and self-reflection. This would be seen in them being able to talk confidently about their work, and sharing their work with others. Progress will be shown through outcomes and through the important record of the process leading to them.

Early Years

Children will begin to develop an awareness of Design and Technology through activities linked to 'Expressive Arts and Design' and 'Understanding the World' as outlined in the Early Years Foundation Stage Curriculum.

Key Stage 1

When designing and making, pupils should be taught to:

- **Design:** design purposeful, functional, appealing products for themselves and other users based on design criteria ¬ generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.
- **Make:** select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] ¬ select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.
- **Evaluate:** explore and evaluate a range of existing products ¬ evaluate their ideas and products against design criteria.
- **Technical knowledge:** build structures, exploring how they can be made stronger, stiffer and more stable ¬ explore and use mechanisms.

Key Stage 2

When designing and making, pupils should be taught to:

- **Design:** use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups ¬ generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
- **Make:** select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately ¬ select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities
- **Evaluate:** investigate and analyse a range of existing products ¬ evaluate their ideas and products against their own design criteria and consider the views of others to improve their work ¬ understand how key events and individuals in design and technology have helped shape the world
- **Technical knowledge** ¬ apply their understanding of how to strengthen, stiffen and reinforce more complex structures ¬ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] ¬ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] ¬ apply their understanding of computing to program, monitor and control their products

Assessment

- Assessment in Design Technology will be about personal progress and development of skills involved rather than how good a piece of work is. Children cannot be assessed by their ability to produce great designs(we are not all great designers)
- Self-assessment and positive critical appraisal of their own work and others work forms part of the children's on-going learning. This takes the form of discussions as a class, group or individual. Teacher assessment also takes the form of discussion with the child focusing on helping the child develop their individual creativity.
- Children in Key Stage Two will be encouraged to annotate their work in sketchbooks, describing how they can further improve their work.
- Further discussions are encouraged through displays of the children's work
- Assessments will be updated half termly using Target Tracker.

Marking

- Teachers must not mark children's sketchbook work, any feedback must be given verbally or via post-it note.

Recording Achievements

- Displays of children's work
- Videos/photographs
- Sketchbooks/books of children's work
- Folder of examples, demonstrating breadth of study

Monitoring

- The Subject leader and SLT will monitor the subject in accordance with the school policy.
- Planning and assessments will be checked and children interviewed.
- Resources will be monitored throughout the year.
- Target Tracker must be updated half termly for the unit taught.

CPD

Kapow videos, staff meetings and/or INSET will provide time for developments, resources and teaching ideas to be delivered to class teachers.

Equal Opportunities and Special Educational Needs

This school is committed to working towards equal opportunities in all aspects of school life. All recourses used will support this commitment. Art is important because it is a non-verbal means of organising ideas and expressing feelings. Therefore every child irrespective of age, gender and ability is able to participate. Activities undertaken are matched to each individuals needs and support Individual Education Plans and Statements where appropriate.

Resources

- Resources are stored for both Key Stages in our Design Technology area and in additional cupboards in the atrium.
- General drawing and sketching materials are freely available to each class.
- It is the responsibility of the teachers and the coordinator to review the use of resources, which will be replaced or purchased after review. Staff should submit lists of any resources required to the coordinator.
- Collections are constantly being built up gradually and appeals are made to parents when required.
- The subject leader is always available for any help in regards to ideas, designers/engineers or resources the staff might need.

Health and safety issues

The children should always be encouraged to work in a safe and responsible manner. Teachers should always be aware of the inherent dangers of practical work and ensure the safe use of tools and materials at all times. Children are also taught the importance of hygiene around the handling of food. The children will be taught how to prepare for lessons and tidy up after lessons appropriately and sensibly.

Role of the Design Technology Leader

To monitor the planning and practice throughout the year and review teaching across the school. They have the responsibility for the ordering and the management of suitable resources, progression within the school and the development of the curriculum. When the DT lead attends training and courses, they will provide feedback for the rest of the staff.