

Church Aston Infant School



Design Technology Policy

July 2023



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Review Date	Date Approved by Headteacher	Date of next Policy Review
July 2023	July 2023	July 2026

At Church Aston Infant School we believe that children learn best when they are able to learn through direct experience within a range and variety of contexts. Activities planned for them by the teacher should be relevant, provide and intellectual stimulus and challenge the child. The child should begin to make decisions about their learning and should have an idea about the potential and the outcome of an activity. It is to this end that we work in a child-centred way using the theme or topic approach as much as we are able to plan and determine the child's learning.

Aims

- For the child to participate in technology-based activities, to develop their abilities to design, plans make and evaluate.
- For the child to develop practical skills, in a range of materials and media which can be refined with time.
- For the child to develop the notion that technology is present and important in our everyday lives and surroundings, and that it impacts upon everything we as humans do.
- For the children to develop their knowledge and skills in this subject and apply them to other situations
- For the children to develop and express their creativity through technology
- For the children to be inventive and purposeful by producing objects, systems and artefacts that are able to satisfy a need.

The Technology Process

1. Identification of a problem or opportunity
2. Generate a design and develop ideas for solutions
3. Opportunity to try out ideas generated - the prototype
4. Produce the outcome - artefacts, systems or environments
5. Opportunity to evaluate the outcomes of the activity or process.

EYFS Framework Expressive Arts and Design

ELG: Creating with Materials Children at the expected level of development will: - Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; - Share their creations, explaining the process they have used; - Make use of props and materials when role playing characters in narratives and stories.

National Curriculum Programme of Study for Key Stage 1

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].

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 [for example, levers, sliders, wheels and axles] in their products

Classroom Organisation

For technology to be carried out in a meaningful way, it is necessary to consider the implications for classroom management and organisation. There will be times when technology may be approached as a whole class situation or as a group situation.

Whole class planning will generate good discussion and initial ideas however, it may not be practical for the whole class to be engaged in the making element, because of the need for more concentrated supervision, a limited amount of resources and the added “chaos” factor.

More often than not it is envisaged that the best approach will be when children are working in a group, and there is additional supervision in the classroom. In addition to the organisation of the human resource, attention needs to be focused on the organisation of materials and practical equipment. Equipment needs to be well organised, have a specific place, be labelled clearly and be accessible to the children. Children need to be trained in the proper use and application of equipment, tools, and materials and with regard to health and safety matters. They should be taught to care for equipment and be responsible for its return, and the clearing up which follows an activity.

Resources

There are a growing number of resources available in school. This is an attempt to list them.

Construction materials

Dowel, card, PVA glue, screws, nails, staples, string, wire, spills.

Construction kits

Technical Lego, Duplo, Clix, Polydron, Construct-o-Straws, bolts, cogs.

Graphic media

Paper, thin card, pencils, coloured pencils, wet and dry crayons, pastels, wax crayons, paint, printing inks, cromar paint, varnish, and inks.

Textiles

Hessian, felt, ribbon, wool, cotton, furnishing fabric swatches, dye, fabric paints, silk painting kit, recycled fabric and materials.

Tools

Hacksaw, low temperature glue gun, snips, bench hook, square, vice, G-clamp, hammer, safety rule, hole punch, drill set, hand drill, various files, screwdriver, pliers, Stanley knife, textile tools.

Miscellaneous

Various electrical equipment including batteries and bulbs, magnets, batik kettle.

Record Keeping

Record keeping can be made with the use of photography, by making a brief note in the child's individual record or class floor book, by keeping an example of the child's written account including drawings.

Assessment and Evaluation

It is important that any assessment and evaluation should take place against previously defined criteria. The criteria will be the statements of attainment and the child's own criteria when first identifying the problem to be solved.

Evaluation should make the child aware of whether the problem could have been solved more successfully another way and if there is a need for refinements to be made.

Equal Opportunities

As we believe in the notion that at Church Aston Infant School we teach all children and do not differentiate between boys and girls we do not consider girls doing woodwork and boys having the opportunity to sew to be an issue. All children will be given equal opportunity to work in ways, which are as wide as we can possibly offer.

Inclusion

At our school we teach art and design to all children, whatever their ability and individual needs. This accords with the school's curriculum policy of providing a broad and balanced education to all children. Through our art and design teaching we provide learning opportunities that enable all pupils to make good progress. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talents, and those learning

English as an additional language, and we take all reasonable steps to achieve this. For further details see separate policies: Special Educational Needs and Disabilities; Equalities.

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

Health and Safety

- There is a need for close supervision when children are using tools of any kind
- Children must be given instruction in the safe use of tools and materials
- Children must see the need to work as tidily as possible so as not to create a hazard
- When necessary protective clothing should be worn.
- Please refer to the Risk Assessment for Design Technology.