


Jesse Gray Primary Design & Technology Policy



Head Teacher Signature:	
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Introduction

This document is a statement of the aims, principles and strategies for teaching and learning of Design and Technology at Jesse Gray Primary School.

What is Design and Technology (D&T)?

Design and Technology is the process of designing, making and evaluating products fit for a purpose or improving, refining and extending the use of existing products. It involves the creative application of the principles of science, mathematics, computing and art to solve practical problems and is subject to the constraints of economics and social acceptability.

Principles of the Teaching and Learning of Design and Technology

Design and Technology is important because:

- the designing and making of products is a pleasurable activity which also helps with the understanding of the ever-changing technological world
- technological capability is essential to living and working in a technological society
- it offers opportunities for success to children who do not necessarily succeed in other areas of the curriculum
- it develops children's skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food.
- it encourages children's creativity and encourages them to think about important issues.

Strategies for the Teaching of Design and Technology

The D&T curriculum is organised, where possible on a topic basis wherein:

- approximately 26 hours per year is spent on Design and Technology
- pupils develop their capability through focused practical tasks in which they develop and practice particular skills and knowledge
- pupils engage in activities to investigate, disassemble and evaluate simple products
- capability is developed through a specific assignment in which pupils design, make and evaluate a product using a range of materials and components.

The predominant mode of working in D&T is through co-operative paired & group work, individual work and class teaching. Within this structure

- groups are usually of mixed ability
- children are encouraged to develop inter-personal skills through discussion, enquiry and negotiation and working as part of a team.

There is no specialist teaching in D&T, it is taught by class teachers. Classroom helpers can be used in D&T to assist on outings and visits to museums. They can also be used in the classroom by preparing materials and supervising group activities. They also provide other help, such as the demonstration of specialist skills, where appropriate.

Pupils with special needs receive support from the class teacher to undertake exercises or projects geared to their level of ability and to take an effective and valuable role in mixed ability co-operative group work. Whenever possible their learning is supported by teaching assistants.

- pupils with learning/motor/emotional difficulties who may need support with reading and writing but who may have well developed practical skills in designing and making, and may need closer supervision.
- pupils with particular ability and flair for Design and Technology who are extended through the use of additional, more demanding, assignments

The emphasis in our teaching of D&T is on providing opportunities for pupils to combine their designing and making skills with knowledge and understanding in order to design and make products. The focus is on the assignments in which we encourage children increasingly to take control of their own learning. Work in D&T draws on knowledge from all other subjects of the curriculum especially science, mathematics, computing and art. Pupils develop skills, knowledge and understanding which they can then apply to open ended challenges / assignments

D&T is celebrated within school through

- suitably mounted displays in classrooms and throughout the school
- competitions for published materials such as design and make a Christmas jumper and Christmas cards
- presentation and display of work in assemblies and other public occasions.

As a school, Jesse Gray is currently working towards becoming a Dyslexia Friendly School. This allows us to not only meet the needs of children with dyslexia but other pupils within the school. Evidence suggests that more children benefit when dyslexia friendly approaches are used throughout the school. All teaching and support staff have received in-school training on dyslexia. We aim to ensure that our school is ‘dyslexia friendly’ by using a variety of teaching styles and resources.

Strategies for Ensuring Progress and Continuity

Planning D&T is a process in which all teachers are involved, where possible coverage is fitted into the class’s history / geography topic. If this is not possible a separate Design Technology topic will be covered.

Features of progression

See the appendix: Jesse Gray D&T progression map.

Progression in design and technology can be characterised by:

- an increase in knowledge, skills and understanding;
- moving from familiar to unfamiliar concepts;
- meeting needs which demand more complex or difficult solutions;
- an increase in a child’s own understanding of their learning.

The role of the D&T subject leader:

- take the lead in policy development
- support colleagues in their implementation of the scheme of work and in assessment and record keeping activities
- monitor progress in Design and Technology and advise the headteacher on action needed
- take responsibility for the purchase and organisation of central resources for Design and Technology
- keep up-to-date with developments in Design and Technology education and disseminate information to colleagues as appropriate.

Feedback to pupils about their own progress in Design and Technology is achieved through:

- verbal feedback to pupils while partaking in practical tasks
- aims to help children learn, not to find fault, and to be positive and constructive
- is done while a task is being carried out through discussion between child and teacher
- of written work and design drawings may be carried out in the absence of pupils but is followed up by discussion between child and teacher where possible.

Formative assessment is carried out by teachers in the course of their teaching.

See the appendix: Jesse Gray DT assessment map

Suitable tasks for assessment include:

- small group discussions in the context of a practical task
- individual / group discussions in which children are encouraged to appraise their own work and progress.
- DT is part of the regular cycle of assessment for foundation subjects every term, teachers assessing on OTrack against the assessment standards.
- Data analysis is carried out by the subject leader to help inform planning and next steps with teams, ensuring the training and support is offered.

Reporting to parents is done in the Summer term through through a written report, reporting whether they've met the age related expectations for their year group. Reporting in Design and Technology will focus on each child's designing skills, their technical knowledge, physical making skills and evaluating skills.

Strategies for the Use of Resources

Large materials are stored in a Technology stockroom, which is situated at the back of the upstairs Computer suite. They include a variety of materials (e.g. wood, cardboard, plastic sheeting, fabric, ribbon). Dried food resources are stored in the cupboard above the sinks in the STEM lab . Sharp, and potentially dangerous resources (knives, graters, peelers, saws) are kept underneath the sink in the STEM lab, in a locked cupboard. All other resources are stored in clearly labelled draws and cupboards in the STEM lab. It is the responsibility of the teacher of each lesson to ensure that all resources are put back in the correct place and that they are looked after. In the case of any breakages of equipment, this should be reported to the DT subject leader who will then seek to replace the resource, should budget allow.

Budget for DT is reflective of the fact that a lot of the resources are consumables and one-use only. All teachers are to plan their projects a half term in advance, requesting resources.

Computing is an available resource which is used when appropriate in Design and Technology for planning and design, publishing and research - using the internet as appropriate. In upper key stage two, pupils will program, monitor and control their products.

HEALTH AND SAFETY ISSUES IN D&T include:

- use of materials, tools and techniques in accordance with health and safety requirements
- appropriate storage of tools and materials
- teaching pupils to recognise hazards in a range of products, activities and environments and take action to control the risks to themselves and others.

For Food Preparation

Members of staff preparing food to be overseen by a member of staff who has completed Level 2 Food Hygiene & Safety certificate. The overseeing member of staff will have ultimate

responsibility to ensure that the DT room and equipment is cleaned effectively, that food is stored safely and allergies of the participants are known.

All staff (as of June 2023) has completed a Basic Food Safety and Hygiene course

Before any food preparation, check the school food dietary list for each class that you're cooking with to be aware of dietary & allergy requirements e.g. nut allergies, halal, vegetarian.

These points should be observed before food preparation:

- Surfaces cleaned down and wiped with antibacterial cleaner before and after food preparation
- Aprons to be provided.
- Access to hand-washing and washing up facilities.
- Appropriate storage facilities for food – there is a fridge and freezer in the STEM lab for food storage.
- Teach dangers of hot cookers/ utensils,
- Supervise use of knives, peelers & graters.

COMMUNITY – Jesse Gray has links with Emmanuel School, where we have completed a mechanics project together. GCSE pupils came to Jesse Gray to help lead a project with Year 5 and 6 pupils who were targeted as needing additional support in mechanics. Links with West Bridgford school, where ex-Jesse Gray pupils have come to help with a STEM project, designing and programming vehicles.

Appendices

Jesse Gray Assessment progression

Jesse Gray Standards progression