

Design Technology Policy

Summer Term 2022



The Valley Community School

Reviewed: June 2022

Ratified June 22 Curriculum Committee

Reviewed by:

Linked Governor and N Leonard

To be reviewed: April 24

The Valley Community School

OUR VISION

“A world class centre of outstanding learning”

OUR MISSION

“Together we’re better”

Founding principles that underpin our philosophy of
being truly inclusive

We aspire in all we do to ensure we create a culture of:

High Equity:

Narrowing the gaps between pupils in different socio-economic groups

High Achievement:

For all through rigorous challenge, adaptation and reflection

High Inclusion and Engagement:

Adapting and supporting narrowing and bridging gaps in achievement

High Expectations:

Of ourselves, our pupils and our families in effective partnerships

Our core values:

Acceptance

Fairness

Trust

Equality

Respect

Within key foundation subjects, assessment will be twofold and based not only on key learning milestones, as set out within the International Primary Curriculum (IPC) and also the mastery of expectations specific to each year group, as exemplified within the National Curriculum and its subsidiary guidance.

The school feels strongly that there is a need to develop both global citizenship and, where possible, teach the fundamental principles of British Citizenship. This encompasses;

- A sense of fair play
- Tolerance
- Duty and remembrance
- Respect
- Values
- Ethics
- Belonging
- Contributing to and supporting all our local communities
- Perseverance.

THE VALLEY COMMUNITY SCHOOL

DESIGN TECHNOLOGY: Intent

General Statement

Design and Technology prepares children to take part in the development of tomorrow's rapidly changing world. Creative thinking encourages children to make positive changes to their quality of life. The subject encourages children to make positive changes to their quality of life. The subject encourages children to become autonomous and creative problem-solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas and eventually making products and systems. Through the study of Design and Technology, they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industrial practices. This allows children to reflect on and evaluate present and past Design and Technology, its uses and its impacts. Design and Technology helps all children to become discriminating and informed consumers and potential innovators.

We are living in a highly developed technological society where children are constantly using and controlling a wide range of technology in everyday life. From light switches to computers, design and, indeed, technology is all around us

Aims

To develop imaginative thinking in children and to enable them to talk about what they like and dislike when designing and making;

To enable children to talk about how things work and to draw and model their ideas;

To encourage children to select appropriate tools and techniques for making a product, whilst following safe procedures;

To explore attitudes towards the made world and how we live and work within it;

To develop an understanding of technological processes, product and their manufacture and contribution to our society;

To foster enjoyment, satisfaction and purpose in design and making;

To identify the cross-curricular capabilities of Design and Technology through curriculum opportunities in a topic or thematic approach.

Our D&T Curriculum at The Valley Community School

At The Valley, we appreciate and understand the importance of Design and Technology for our pupils in today's ever-changing world. We strive to deliver an inspiring, practical and rigorous curriculum, enabling our pupils to use creativity and imagination to solve real life problems within a variety of contexts.

We use an adapted scheme, drawing from the D&T Association's 'Project on a Page' medium term plans and linking our projects to the IPC, which runs throughout the school. This enables us to deliver a broad and balanced D&T offer. Our adapted spiral curriculum builds upon prior learning and skills.

Each D&T unit is process driven and has a project title, which ensures the user, purpose and product. Throughout the unit, children will investigate/disassemble, design, create and evaluate their finished products. Each unit is meaningful, relevant to a real-life scenario and builds upon pupils prior knowledge and skills.

Statement of Implementation

Teachers create a positive attitude to D&T learning within their classrooms and reinforce an expectation that all children are capable of achieving high standards. Our whole school approach to the teaching and learning of D&T involves the following;

- There is a vision for D&T teaching across school that closely allies to broader school vision.
- D&T will be taught in planned and arranged blocks (D&T days) by the class teacher. This is a strategy to enable the achievement of a greater depth of knowledge.
- D&T teaching embraces the wider "Theories of Action" used across school and is linked to the teaching toolkit.
- Through our planning, we involve problem solving opportunities that allow children to find out for themselves.
- Children are encouraged to ask their own questions and be given opportunities to use their skills and research to discover the answers. This curiosity is celebrated within the classroom.
- Planning involves teachers creating engaging lessons, often involving high-quality resources to aid understanding of conceptual knowledge.
- Teachers use precise questioning in class to test conceptual knowledge and skills, and assess children regularly to identify those children with gaps in learning, so that all children keep up.
- We build upon the learning and skill development of the previous years. As the children's knowledge and understanding increases, and they become more proficient in selecting, using their skills and choosing materials, they become increasingly confident in their growing ability plan, create and evaluate meaningful products.
- D&T specific skills and 'Firsts' are embedded into lessons to ensure these skills are being developed throughout the children's school career and new vocabulary and challenging concepts are introduced through direct teaching. This is developed through the years, in-keeping with the IPC topics.
- Teachers demonstrate how to use practical and subject-specific equipment and skills in order to embed understanding.

Statement of Impact

- The core function of our curriculum is to make changes to pupils' long term memory so that they learn and remember more. This enables them to make excellent progress through the D&T curriculum.
- The successful approach results in a fun, engaging, high-quality D&T education, that provides children with the foundations for understanding our modern and changing world.
- Our focus on inventors and existing products enables the children to gather a vast and deep understanding of the importance of D&T and how much of a part it plays in our everyday lives. Children learn the possibilities for careers in Design and Technology.
- Pupil voice is used to further develop the D&T curriculum, through questioning of pupil's views and attitudes to Science to support the children's enjoyment of science and to motivate learners.
- Pupils and families appreciate the cultural capital of STEM subjects and these are often the favourite chosen career routes for our families for both boys and girls.

Design & Technology in relation to the National Curriculum

Design & Technology is organised according to the guidelines set out in the National Curriculum. Pupils will design and make a range of products. A good quality finish will be expected in all design and make activities appropriate to the age and ability of the pupil.

The work covered in each year group ensures a balance of:

- investigative, disassembly and evaluative activities,
- focused practical tasks
- designing and making assignments.

Recommended Activities

Units of work includes three types of activities

- investigate, disassembly and evaluative activities,
 - focused practical tasks,
 - designing and making assignments.
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- Focused practical tasks are used to teach correct use of tools and equipment

Relationship to other Subjects

Design & Technology is taught as a subject specific activity through a combination of whole class teaching, group work and individual work. Cross-curricular links are detailed on the medium term planning sheets. The school is progressively working towards delivering technology skills through the Creative Curriculum initiative. The coverage of skills is monitored by the head of planning through the half-term skills coverage audit completed by teachers.

Inclusion opportunities:

- Teachers ensure that pupils have access to the range of Design & Technology activities and use opportunities within Design & Technology to challenge stereotypes.
- Pupils are encouraged and supported to develop their Design & Technology capability using a range of materials.
- Teachers differentiate activities within Design & Technology to ensure that the specific needs of individual children are best met.

“How we make suitable adaptations to support the learning of Disadvantaged and Special Needs Pupils “

“At The Valley School we adapt the curriculum to make it accessible to all pupils. This involves adapting the curriculum content, methods by which it is taught, teaching sequence or resources. Our highly trained and dedicated staff know that true inclusion does not just happen in core subjects, but throughout the whole curriculum.

Our Inclusion practices include:

- Schemes of work in the short, mid and long-term, with clearly defined milestones and practical objectives exemplified clearly
- Pre-teaching key concepts and language
- Post-teaching to consolidate
- Supporting accessibility by understanding by focussing on key vocabulary
- Using hands on drama, making and the arts, rather than defaulting to reading/written content only
- Using ICT technology, apps, video and computer based technologies where appropriate
- Waves of intervention that focus on Basic Skills and language proficiency that supports wider curriculum accessibility”

Resource Management

Each Year Group has access to a supply of tools and materials appropriate to their technology projects.

- Food resources, tools and equipment are kept in the Food Technology Area. No resources, from any area, should be collected or returned by pupils.

Time Allocation

The present recommendation suggests that Design & Technology should be allocated approximately an hour per week or the equivalent if it is blocked for a number of weeks.

British Values

- Approached through studying British inventions and inventors.

SMSC

- Approached through various IPC projects that help others e.g. products sold for charity.

Cultural Capital

- Work related to the development of technologies through time (standing collections)

Recommended Activities

Units of work should always include three types of activity

- investigate, disassembly and evaluative activities,
- focused practical tasks,
- designing and making assignments.

Focused practical tasks are used to teach correct use of tools and equipment

Relationship to other Subjects

Design & Technology is taught as a subject specific activity through a combination of whole class teaching, group work and individual work. Cross-curricular links are detailed on the medium term planning sheets. The school is progressively working towards delivering technology skills through the Creative Curriculum initiative. The coverage of skills is monitored by the head of planning through the half-term skills coverage audit completed by teachers.

Equal Opportunities and Special Needs

Teachers ensure that pupils have access to the range of Design & Technology activities and use opportunities within Design & Technology to challenge stereotypes.

Pupils are encouraged and supported to develop their Design & Technology capability using a range of materials. Teachers differentiate activities within Design & Technology to ensure that the specific needs of individual children are best met.

Assessment and Recording

Examples of differentiated work will be monitored for WTS, EXS and GDS including PP pupils. An annual report to parents details progress and achievements made in designing and making.

On completion of each unit of work teachers should complete an assessment on the IPC records These are available to the coordinator.

Resource Management

Each Year Group has access to a supply of tools and materials appropriate to their technology projects.

Food resources, tools and equipment are kept in the Food Technology Area. No resources, from any area, should be collected or returned by pupils. If a Teaching Assistant is asked to collect or return resources they should be briefed as to where the resources must be returned.

Safety Guidelines

Staff should refer to the school's Health & Safety Policy.

It is the responsibility of teachers to teach the safe use of tools and equipment and insist on good practice.

Use of craft knives is limited to teaching staff/adults or to children in Year 6 under direct supervision.

Only children in Year 6 should use the low temperature glue guns under direct supervision.

Hot glue guns are to be used by teaching staff/adults only.

Food - Hygiene and Safety

Perishable food is bought and/or brought in and used on the day it is needed.

Non perishable food (e.g. some dry foodstuffs) may be safely stored for future use, providing the 'Use by Dates' are still relevant at the time of use. Disposal of stored items of food is the responsibility of the class teacher.

Teachers and support staff will oversee that cupboards, worktops and cookers etc are clean and in working order. Plastic disposable aprons should be worn. Adults and children should follow strict hygiene principles.

Time Allocation

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Role of Subject leader

- To lead development of Design & Technology in the school,
- provide guidance to individual staff members,
- regularly update staff on new tools and materials,
- review and monitor the success of the planned units of work within the IPC,
- order stock linked to the planned units of work,
- be responsible for the organisation and maintenance of the Design Technology resources.
- Work related to the development of technologies through time (standing collections)

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