



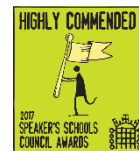
CAMBRIAN
Nurturing Growth - Inspiring Minds



DESIGN & TECHNOLOGY POLICY



OXFORD DIOCESAN
BOARD OF EDUCATION



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Author: Ms L Warren

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*"Small school, big hearts.
Wise, responsible, kind like the Good Samaritan."*

Our Mission Statement

We are a caring, village school which promotes Christian values, where each child receives a high standard of education that is broad, challenging, exciting and encourages creative thinking. We encourage every learner to be the best they can be, to reflect and plan the next steps in their learning journey, demonstrating a respect towards others and contributing to the communities of which they are a part.

Our Vision

Our vision is to nurture unique individuals who are outstanding learners, demonstrating wisdom, responsibility and kindness within their communities. Using the Good Samaritan as our role model, we know that loving others as we would want to be loved is upmost for happy, healthy lives.

Values

Wise - we think wisely and are committed to learning. We relish and retain knowledge and value high standards. We have high expectations, high aspirations and enjoy challenge. Like the wise man who built his house upon the rocks (Matthew 7), we think creatively and use learning to make good decisions. We have firm foundations for our lives.

Responsible – we are responsible for ourselves – our well-being, our behaviour and our learning. We strive to be the best people we can be and the best person for others. We have a responsibility to others inside and out of school and at times need to be patient, tolerant and courageous in demonstrating this. As Noah had to step up when God asked him to, so must we. We are a school family whose strength is in our ability to work together. We know that perseverance and hard work will bring reward and that resilience is about coping with challenges positively.

Kind - we are kind. Through support, nurture and understanding we all flourish. Each one of us is unique – on the outside and inside. We value diversity and respect difference. There are hundreds and thousands, millions of us but God knows everyone and God knows me!

Curriculum Intent

Our curriculum is designed around our Christian values. Each term, we focus on 3 values across the school and develop a working understanding of them through our choice of texts and foundation subject learning, embedding reading and maths at the core. Our approach is to deliver knowledge rich, sequential learning which excites and inspires, provides opportunity for recap and challenge, raises questions for debate, develops learners' confidence and enables independent learning to flourish. High standards, collaboration and valuing individuals' well-being is at the heart of this process. We believe that how we teach is as important as what we teach and that enrichment experiences are an entitlement. We want our curriculum to enable our children to be wise, responsible and kind in line with our school core values.

Curriculum intent

Using knowledge, research and creativity we want pupils to design and make products that solve problems within a variety of contexts, considering their own and others' needs. They are taught a broad range of subject knowledge, learn how to take risks and become resourceful and innovative. They create quality products and evaluate their work in order to identify their successes and future improvements.

Aims

- To develop the confidence and ability of all children to solve and enjoy the challenge of technological problems.
- To provide a core of sequential knowledge alongside a skills development approach focusing on the three key elements of Textiles, Mechanisms and Construction and Food by incorporating;
 - focused tasks to develop practical skills and techniques
 - product evaluation and investigation
 - processes of designing, making and evaluating
- To help develop the social skills necessary to work as a team, as well as the ability to work independently when the situation demands.
- To stimulate curiosity, imagination, creativity and develop the ability to operate effectively in a technological world.

Approach to Teaching and Learning

Children undertake Design and Make Assignments (DMAs) through their creative curriculum. Projects are purposeful and placed within the contexts of the themes for the term. The National Curriculum programmes of study are spread across a two year cycle in each class, ensuring coverage across KS1 and 2.

In KS1, children build on their creative development, knowledge and understanding of the world and other areas of the EYFS curriculum. Profiles follow children into KS1 and show their achievements through annotated photographs which is a useful way of ensuring skills and knowledge can be built upon. There is excellent liaison between classes and continuous provision is available throughout term 1 so that staff can track and support progress and children can maintain their confidence.

At KS2 children build on and extend skills and knowledge learned in KS1. Learning skills include: observation, communicating information, asking questions and solving problems, looking at artefacts and using ICT to apply learning to unfamiliar situations. Children are taught specific skills and techniques and given opportunities to apply them in creative projects, which link to termly themes. Key knowledge is identified in the long term curriculum plan which ensures it is sequential and each new step builds on ones gone before.

Children may engage in weekly DT activities, however the time allocation may well be taken in a block, in order to give children a chance to get involved and complete activities with quality outcomes. Design and Technology teaching involves a combination of whole class, group and individual teaching. The learning opportunities can be divided into three main areas:

- [Investigative, Disassembly and Evaluative Activities \(IDEAs\)](#)
These activities provide opportunities for the children to explore existing products and to gain skills, knowledge and understanding which can be applied in a Design and Make Assignment.
- [Focused Practical Tasks \(FPTs\)](#)
FPTs provide opportunities to learn and practise particular skills and knowledge using tools and techniques.
- [Design and Make Assignments \(DMAs\)](#)
A DMA provides an opportunity for the children to combine their skills, knowledge and understanding to develop products that meet an identified need. In general, DMAs in KS1 will tend to be shorter in duration and as children move towards the end of KS2, their designing and making will become more complex and therefore more time consuming and detailed.

Assessment

Assessments in D&T are based on: teacher observations, discussions, pupil designs and end products; and are made at the end of each unit. Pupil experiences and progress is documented on FFT Curriculum Tracker. Samples of work are photographed and stored on the shared drive as examples and to demonstrate progress. We use the MAT key milestones alongside the National Curriculum statements to ensure a of KS3.

- Theory
- Be able to identify basic material (i.e. Pine rather than Wood, or Cotton rather than Material).
- Be able to Identify some basic tools used in D&T (Hack Saw, Sewing Machine, etc).
- Be able to produce a drawing of an item they would like to make with simple note explaining their choices.
- Know where some materials come from (i.e. Wool from sheep, Cotton from plants, Flour from Wheat, etc).
- Know about safety relating to working in a Food room, Workshop and Textiles room.
- To be divergent in their thinking relating to generation of ideas.
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- Practical
- Be able use a pair of scissors skillfully.
- To have had experience of baking/cooking.
- Be able to measure in metric effectively.
- To have had some experience of producing a model using cardboard or paper.

Resources

Resources are kept in the Art and Technology room. Requests for stock orders need to be made through the school office and are approved by the subject lead.

Health and Safety (H&S)

All staff are aware of H&S guidelines. Children work safely in prepared surroundings and are properly supervised during D&T tasks. They are taught the correct use of tools and equipment, and are made aware of the dangers and how to avoid them by working safely.

Food Hygiene

- Adults leading cookery/food preparation lessons are supported by our catering manager who has a Level 2 Food and Hygiene Certificate.
- Pupils and staff working with food must wear aprons designated for cooking.
- Painting equipment must be washed in sinks not used for food preparation.
- Jewellery should be removed and hair tied back.

Glue Guns

- **MAY** be used by Key Stage One children **ONLY IF**:
 - appropriate and rigorous risk assessments have been made by the class teacher,
 - in a designated work area,
 - the child has been given and understands how to use the glue gun safely, and
 - there is **1:1 supervision** of the child.
- Key Stage Two children should use glue guns **under supervision**:
 - appropriate and rigorous risk assessments have been made by the class teacher,
 - in a designated work area, and
 - the children have been given and understand how to use the glue gun safely.

Craft Knives

- Craft knives, quick cutters and rotary cutters should only be used by an adult/teacher in KS1.
- KS2 children may use cutting equipment under supervision, using a cutting mat.

Sawing

- Bench hooks and clamps must be used when sawing any material.
- Safety goggles **may be** worn and any loose items of clothing/hair **must** be tucked in.



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Equal Opportunities

We provide activities for and encourage all pupils in DT work, taking into account the individual needs of all children. SEND children are considered in planning to ensure activities are scaffolded, accessible and best meet their needs.

Monitoring

It is the responsibility of the DT lead to ensure the implementation of this policy, monitor standards, offer advice and support to staff, provide a model and promote excellence in children's achievements. The subject lead will ensure that development priorities are reflected in the subject action plan each year.

Appendix 1 – Sequencing in DT KS1-2

DT sequencing	Autumn	Spring	Summer
Year 1 / 2	<p>Focus: Textiles</p> <p>Key knowledge: Know that sewing joins materials together. Know how to add a hanging loop.</p> <p>Key activities: Making Christmas decorations (stars and moon) from felt templates.</p>	<p>Focus: Mechanisms and construction</p> <p>Key knowledge: Know what an axle is, how it joins to a chassis and how it allows a wheel to turn.</p> <p>Key activities: Make a vehicle with wheels.</p>	<p>Focus: Food</p> <p>Key knowledge: Know a basic biscuit recipe and that you can adapt it. Know when you heat a biscuit dough it hardens. Know about importance of hygiene.</p> <p>Key activities: Hodgeheg biscuits for mini-enterprise</p>
	<p>Focus: food</p> <p>Key knowledge: Know what a sandwich is and that it can have a variety of fillings. Know the range of ingredients, equipment and techniques needed to make a sandwich. Know the need for accuracy and care to make a successful product. Know about the importance of hygiene</p> <p>Key activities: Make sandwiches and video each other like TV chefs.</p>	<p>Focus: Mechanisms and construction</p> <p>Key knowledge: Know what levers and sliders can do. Know a range of joining techniques.</p> <p>Key activities: Use craft materials to create a new moving tail for Mr Fox.</p>	<p>Focus: Textiles</p> <p>Key knowledge: Know that stuffing gives a 3D shape. Know what a pattern is used for. Know about pinning. Know stitching joins materials.</p> <p>Key activities: Sew a Dogger</p>

DT sequencing	Autumn	Spring	Summer
Year 3 / 4	<p>Focus: Construction and mechanisms</p> <p>Key knowledge: Know paper folding, cutting and joining techniques to make pop ups and moving parts (levers and sliders)</p> <p>Key activities: Pop-up books about the Mayans.</p>	<p>Focus: Textiles</p> <p>Key knowledge: Know running stitch, back stitch and over stitch. Know why it's important to make a pattern and cut out. Know about seams and why they are useful. Know how to secure thread by over stitching at the beginning and finish (rather than knotting).</p> <p>Key activities: Roman purses (Bulla)</p>	<p>Focus: Food</p> <p>Key knowledge: Mixing ingredients can create new products. Know about the processes of heating, melting, mixing and setting. Know that self-raising flour or baking powder will make cakes rise. Know about the importance of hygiene</p> <p>Key activities: Making fudge, sweets, muffins for mini-enterprise</p>
	<p>Focus: Construction and mechanisms</p> <p>Key knowledge: How levers support effort. That cutting and slitting can join materials. Know about materials and what makes a strong but flexible structure</p> <p>Key activities: Create a Viking longboat or a dragon with moving wings.</p>	<p>Focus: food</p> <p>Key knowledge: Know about Chinese ingredients and traditional dishes. Know about the importance of hygiene.</p> <p>Key activities: Chinese spring rolls and noodle dishes</p>	<p>Focus: Textiles</p> <p>Key knowledge: Know running stitch, back stitch and cross stitch. Know what Binca is. Know how to secure thread by tying a knot at the back.</p> <p>Key activities: Create a stitched web with an adjective inside.</p>

<p>Year 5 / 6</p>	<p>Focus: Mechanisms</p> <p>Key knowledge: Know what a cam is and what it does. Know about the effects of different shaped cams.</p> <p>Key activities: Make a toy using different cams to demonstrate evolutionary changes</p>	<p>Focus: Food</p> <p>Key knowledge: Typical ingredients in Greek recipes. Know about the importance of hygiene. Know a basic bread mix.</p> <p>Key activities: Make some Greek dishes, including pitta breads to share at lunch and with parents.</p>	<p>Focus: Textiles</p> <p>Key knowledge: Know pinning, sewing and stitching can join fabrics. Know chain and blanket stitch.</p> <p>Key activities: Reuse and improve old clothing for mini-enterprise project.</p>
	<p>Focus: Textiles</p> <p>Key knowledge: Sewing machines are used to make lots of stitching easier. Know that items can be recycled and made into something else useful and this is economical. Know that planning, measuring, marking and pinning are needed for accuracy.</p> <p>Key activities: Re-using materials / recycling / make do and mend philosophy - make a sock monkey for a child with no toy or a simple bag from old fabric</p>	<p>Focus: Food</p> <p>Key knowledge: Know about types of traditional ingredients and dishes made in the USA (Jambaylaya) and S Africa (Chakalaka). Know about the importance of hygiene.</p> <p>Key activities: Deep South / USA / S African ingredients and menus for cooking and creating recipes</p>	<p>Focus: Construction and mechanisms</p> <p>Key knowledge: Know what vices, saws, glue-guns, hammers and nails are used for. Know artefacts need to be made with precision and care if they are to be useful.</p> <p>Key activities: Bug hotels, hedgehog houses or bird boxes</p>