

DESIGN AND TECHNOLOGY POLICY





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Design Technology Policy

Rationale

At Shiremoor Primary School we believe that 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 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.

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 and products, their manufacture, and their contribution to our society.
- To foster enjoyment, satisfaction and purpose in designing and making.

Implementation of the Policy

At Shiremoor Primary School through the study of Design and Technology children combine practical skills with an understanding of aesthetic, social and environmental issues. This allows them 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. At Shiremoor Primary School children learn to produce practical solutions to real problems. Children develop technical understanding and making skills, learn about design methods and investigate their environment and the materials around them. We use a variety of teaching and learning styles in Design and Technology lessons. The principal aim is to develop children's knowledge, skills and understanding in Design and Technology, and teachers encourage children to use their knowledge and understanding when developing ideas, planning and making products and evaluating them.

At Shiremoor Primary School we use a balance of whole-class teaching and individual/group activities, giving children the opportunity to both work on their own and to collaborate with others. Children are encouraged to listen to the ideas of others, and treat them with respect, to critically evaluate existing products, both their own work and those of others. They have the opportunity to use a wide range of materials and resources, including ICT.

Shiremoor Primary School Approach to Design Technology

At Shiremoor Primary School planning is the responsibility of the class teacher. All teachers plan sequences of learning in Design Technology so that they build on prior learning. Children of all abilities have the opportunities to develop their skills and knowledge in each unit and through planned progression we offer them increasing challenge as they move up through school. Teachers should access the band of objectives relevant to their year group. Teachers may select a context in which the objectives are taught. In planning, the delivery of the curriculum will be differentiated to allow for children of all abilities.



The scheme of work is set out in three main sections:

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1. Investigate, disassemble and evaluation activities.
2. Focused practical tasks.
3. Design and make projects.

Foundation Stage

We encourage the development of skills, knowledge and understanding that help Nursery and Reception children make sense of their world. We relate this development to the objectives set out in the “Early Years Foundation Stage” (Practice Guidance), which underpins the curriculum planning for children aged from birth to five. This learning forms the foundations for later work in design and technology. These early experiences include asking questions about how things work, investigating and using a variety of construction kits, materials, tools and products, developing making skills and handling appropriate tools and construction materials safely and with increasing control. We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking, discussion and decision making. These activities take place both indoors and outdoors, and are designed to arouse the children’s interest and curiosity. Throughout the Foundation Stage, activities and opportunities are planned where children can learn through talk, play and their own life experiences.

Key Stage 1 and 2

At Shiremoor Primary School during Key Stage 1 the children learn how to think imaginatively and talk about what they like and dislike when designing and making. They build on their early childhood experiences of investigating objects around them. They explore how familiar things work and talk about, draw and model their ideas. They learn how to design and make safely and could start to use ICT as part of their designing and making.

At Shiremoor Primary School during Key Stage 2, children work on their own and as part of a team on a range of designing and making activities. They think about what products are used for and the needs of the people who use them. They plan what has to be done and identify what works well and what could be improved in their own and other people’s designs. They draw on knowledge and understanding from other areas of the curriculum and use computers in a range of ways.

SMSC

Design and Technology is an inspiring, rigorous and practical subject. Using creativity and imagination, children design and make products that solve real and relevant problems within a variety of contexts, considering their own and others’ needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Children learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation. Pupils have the opportunity to work independently and as a team to build resilience and self-esteem through tasks, sharing ideas and resources, peer-assessment and encouraging students to support each other.

Assessment

At Shiremoor Primary School we assess the children’s work in Design Technology by making informal judgements as we observe the children during lessons.

Summative assessment is carried out and recorded using Target Tracker each term. All class teachers are responsible for inputting accurate data that is then monitored by curriculum leaders and senior management. At the end of the year a summative judgement is made for each child as to whether they have achieved the school’s expected standard for the end of the year.



Evidence for teacher assessments is located in the Topic books, Sketch books and Choices Week books and may also be found in the English books when cross-curricular learning has occurred. Staff will store digital

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evidence including photos and videos on a secure IPad or on the school network.

Health and Safety

At Shiremoor Primary School children will be given suitable instruction on the operation of all equipment before being allowed to work with it. Children should be strictly supervised in their use of equipment at all times. Children should be taught to respect the equipment they are using and to keep it stored safely while not in use. Children should be taught to recognise and consider hazards and risks and to take action to control these risks, having followed simple instructions.

Food Hygiene

Children and staff will take care to undertake appropriate hand washing and other hygiene related activities prior to preparing food. Children and staff working with food must wear aprons designated for cooking.

Glue Guns

At Shiremoor Primary School low temperature glue guns should only be used by an adult in Key Stage One and The Foundation Stage unless there is one-to-one supervision for a child. Key Stage Two children should use low temperature glue guns under supervision in a designated work area, wearing safety goggles.

Craft Knives

At Shiremoor Primary School craft knives, quick cutters and rotary cutters should only be used by an adult/teacher in Key Stage One and the Foundation Stage. Key Stage Two children may use cutting equipment under supervision, using a cutting mat and wearing safety goggles.

Sawing

At Shiremoor Primary School bench hooks and clamps must be used when sawing any material. Safety goggles must be worn and any loose items of clothing/hair must be tucked in.

Allergies

All staff are aware of pupils with allergies. Any activity which would potential bring a child into contact with an allergen is risk assessed and measures are put in place to ensure no child is put at any risk.

Differentiation

At Shiremoor Primary School we aim to encourage all children to reach their full potential through the provision of varied opportunities. We recognise that our curriculum planning must allow children to gain a progressively deeper understanding and competency as they move through our school.

More Able Learners

More able learners will be identified as part of our formative and summative assessment procedures. We will provide for their needs through a framework of high quality first teaching which focuses on ensuring the children are challenged appropriately. In addition, we will focus on developing their learning behaviours, including, greater reflection, problem solving and enquiry, making connections, higher order thinking skills and independent learning. The progress of more able learners will be rigorously tracked to ensure more able children reach their full potential.

SEND/Inclusion

Children who are identified as being on the SEND register will be given support as identified on their Individual Provision Map. A variety of support materials are available from SENDCo, Mrs A Irving. Children are supported in the first instance through quality first teaching. Lessons will be differentiated in line with the individual needs of the children. All provision for pupils with SEND is in line with the school's SEND policy.



Equal Opportunities

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At Shiremoor Primary School the curriculum for Design Technology will develop enjoyment of and commitment to stimulating the best possible progress and the highest attainment for all our pupils irrespective of social background, culture, race, gender, differences in ability and disabilities. All of our pupils have a secured entitlement to participate in the Design Technology Curriculum and our teaching approaches ensure the avoidance of stereotyping when planning work or organising groups. All the teaching staff agree that when using reference materials, they should reflect social and cultural diversity and provide positive images of race, gender and disability.

Resources

At Shiremoor Primary School there is a wide range of resources to support the teaching of Design Technology across the school. Classrooms have a store of basic resources. Specialist resources and equipment are stored in the Art-cupboard and should be returned after use.

Monitoring and Evaluation

At Shiremoor Primary School the Design Technology Coordinator monitors planning and assessments – evaluating medium term plans and taking note of annotations, amendments and suggestions made by class teachers. They ensure that the curriculum has been covered and that there are no gaps.

Photographs of completed work and displays may be kept digitally by the Coordinator as a portfolio, in order to monitor and support the raising of standards in Design Technology within the school. The coordinators take responsibility for addressing any needs or concerns that arise as a result of this monitoring.

To monitor and evaluate Design Technology the Design Technology subject co-ordinator does the following:

- Purchases and organises the appropriate resources.
- Supports colleagues in the teaching of Design Technology.
- Keeps up-to-date on the use of Design Technology in the curriculum and regularly attend training for subject leaders held by the LA and feedback new information and ideas to staff.
- Conducts Topic Book/ Sketch book scrutiny to assess the standards of Teaching and Learning through the children's work.
- Regularly reviews and updates the Design Technology Policy and contribute to the school's self-evaluation programme and School Development Plan.
- Carries out analysis of cross school summative assessment data.