

Design & Technology Policy

At Barker's Lane Community School we believe children should have opportunities to develop their designing and making skills to help them make sense of the 'made world'. By becoming aware of human achievements and the big ideas that have shaped the world, they can be inspired to be creative thinkers, developing life-long learning skills for the 21st Century.

Aims and objectives

Children's learning has to be interesting, relevant and meaningful to be effective. At Barker's Lane Community School we nurture children's skills in a rich stimulating environment which supports imaginative thinking and offers exciting opportunities for investigation and exploration both indoors and outdoors. We believe that through these experiences and opportunities will provide children with the skills to be creative and innovative. Children are also involved in a number of DT based international projects.

Through Design & Technology at Barker's Lane Community School we aim to:

- foster enjoyment, satisfaction and purpose in evaluating, planning, designing, modelling, modifying and reflecting;
- provide opportunities for children to develop and practise their designing and making skills;
- enable children to talk about how things work, and to draw, model and create simple products and mechanisms;
- encourage children to select appropriate tools and techniques develop children's imaginative thinking and to enable them to reflect on their own work or the work of others.

Teaching and learning style

We believe children should acquire and absorb skills through a holistic approach to learning. Our principle aim is to develop children's skills, knowledge and understanding through a structured developmental and progressive continuum, taking account of their learning needs and allowing for spontaneous developmental opportunities when they arise. We aim to ensure learning is exciting, challenging and creative, and that learners understand what they need to do to improve and how they can do this.

We recognise all children are different and provide suitable learning opportunities by matching the challenge of the activity to the needs / ability of the child. We achieve this through a range of strategies taking account of all learning styles, extending children's thinking skills, providing opportunities for children to plan, develop and reflect on their own learning through the organisation of the learning environment. We encourage children to learn collaboratively and take some ownership for their own learning with adults facilitating this, willing to learn alongside.

In the Foundation Phase, a child's designing and making skills should be developed through using information to generate ideas; this leads to stimulating and creative making opportunities across all Areas of Learning. Children's progression in design and technology capability is observed with an understanding of child development and the stages of learning children move through.

At Key Stage 2, learners are given opportunities to build on their experiences during the Foundation Phase. They are taught to design and make simple products by combining their designing and making skills with knowledge and understanding in contexts that support their work in other subjects and help develop their understanding of the made world. Learners become aware of human achievements and the big ideas that have shaped the world. They are encouraged to be creative and innovative in their designing and making while being made aware of issues relating to sustainability and environmental issues in the twenty-first century.

Planning for D&T

D&T is taught to all pupils at Barker's Lane Community School, taking account of Foundation Phase and the National Curriculum (NC).

In the Foundation Phase this is part of Art, Craft & Design (see Creative Development Policy). At Key Stage 2 this comprises of:

- Designing
- Making
- Food
- Rigid and Flexible Materials
- Systems & Control

Planning is carried out in three phases (long-term medium-term and short-term). The long-term plan maps out the learning challenges to be covered over the Foundation Phase and each year group at Key Stage 2. The Learning Area Leaders liaise with colleagues to establish these.

Our medium-term plans give further details of learning challenges for each term. These plans focus on developing children's thinking skills, determine the learning challenges and ensure an appropriate balance across the term. The Learning Area Leaders keep a copy of these plans and review them with colleagues.

Short term plans are completed on a weekly basis by individual / teams of teachers. These list the questions for thinking, specific learning challenges and expectations for each activity and some detail of how these will be delivered.

Much D&T is planned across all areas of learning in addition to any specific taught sessions. Each teacher keeps these individual plans, and the teachers and the Learning Area Leaders discuss them on an informal basis. The headteacher monitors these plans each half-term.

D&T is planned to build upon children's prior learning. Whilst there are opportunities for children of all ability levels to develop their skills, knowledge and understanding, there is planned progression built into the scheme of work, so that children are increasingly challenged as they progress.

Planning takes account of key skill development, including the development of children's thinking skills through a variety of problem solving and investigational experiences.

The Literacy & Numeracy Framework (LNF)

The Literacy and Numeracy Framework (LNF) sets expectations for learners to develop and apply their literacy and numeracy skills across the curriculum.

Literacy skills in oracy, reading and writing; and numeracy skills in numerical reasoning, number, measures and data are planned for across all areas of the curriculum.

D&T and Skills across the Curriculum in Key Stage 2

At Key Stage 2, learners are given opportunities to build on their thinking and ICT skills that they have started to acquire and develop during the Foundation Phase, in line with the non-statutory *Skills framework for 3 to 19-year-olds in Wales*. Learners continue to acquire, develop, practise, apply and refine these skills through group and individual activities in a variety of contexts across the curriculum. Progress can be seen in terms of the refinement of these skills and by their application to tasks that move from: concrete to abstract; simple to complex; personal to the 'big picture'; familiar to unfamiliar; and supported to independent and interdependent.

Thinking Skills

Learners develop their thinking across the curriculum through the processes of **planning, developing and reflecting**.

In design and technology, learners design and make products through the iterative process of creating and developing ideas, designing products, planning, making and reflecting on their decisions and outcomes in terms of their finished product.

Digital Competency

Learners develop their digital skills across the curriculum by **finding, developing, creating and presenting information and ideas** and by using a wide range of equipment and software.

In design and technology, learners research and develop their ideas by using ICT to find information from databases and the internet. They communicate and present their ideas using word processors, presentation software and computer-aided design.

In addition to this at Barker's Lane Community School we take account of statutory requirements and cross curricular themes, such as the Curriculum Cymreig and personal and social education, which includes equal opportunities, food and fitness and sustainable development.

At Key Stage 2, learners at Barker's Lane Community School are given opportunities to build on the experiences gained during the Foundation Phase, and to promote their knowledge and understanding of Wales, their personal and social development and well-being, and their awareness of the world of work.

Curriculum Cymreig

In design and technology, learners are given opportunities to use the rich characteristics and resources of Wales as a source of inspiration and a context to design and make products.

Personal & Social Education

In design and technology, learners work in contexts that allow them to make decisions based on the values that underpin society, helping them become active and informed citizens. They are made aware of human achievements and the big ideas that have shaped the world. They are encouraged to be enterprising and innovative in their designing and making, while having regard for sustainability and environmental issues in the twenty-first century.

Additional Learning Needs

D&T is developed with all children, whatever their ability. It forms part of a broad and balanced education for all children.

Learning opportunities are matched to the needs of all children to include challenge and support for our most and least able children. When necessary these take account of any relevant targets set for individual children in their Individual Education Plans (IEPs).

Equality

Equality is always observed with positive attitudes being developed. We will not unlawfully discriminate on grounds of age, disability, gender, gender reassignment, race or ethnicity, religion or belief, sexual orientation, marriage or civil partnership, pregnancy and maternity or on the grounds of Welsh language.

All pupils, their parents and guardians, volunteers, staff and school governors are valued and will be treated with dignity and respect. The school will not tolerate any form of discrimination, harassment or victimisation.

We will work across our school community to ensure our commitment to equality and fairness is shared and take steps to ensure that our school is accessible, welcoming and inclusive.

Health and Safety

Children are encouraged to discuss safety implications concerning themselves and their fellow pupils when working. We aim to ensure pupils work in an environment which is safe and hazard free at all times.

Parental Involvement, Partnerships & Community

Parents and members of the community are encouraged throughout the school to support their children's learning.

Parents are encouraged to come into school to use their own skills to support D&T at school and occasionally at home with projects.

Visits and events support and enrich children's learning e.g. Techniquest, Career Wales Bridges project

Liaison / Transition

Whole school planning allows for smooth transition between phases. Liaison between learning area leaders and local high schools allows for smooth transition, progression and continuity from FP to KS2 to KS3.

Assessment and Recording

Teachers make assessments of children's D&T through observation. These short-term assessments are closely matched to learning challenges and are recorded as part of on-going formative assessment records.

We make medium-term assessments on a termly basis to measure progress / inform next step for learning by making judgements as we observe children participating in activities and by observing process and outcomes. We make a judgement against outcomes / level descriptors which takes account of F.P and N.C guidance. These assessments are recorded and used to plan for future learning.

At the end of the Summer Term, the next teacher has access to this information, so that s/he can plan for the new school year.

These records also enable the teachers to make an annual assessment of progress for each child, as part of the child's annual report to parents.

Resources

There are a wide range of resources, including ICT resources to support D&T across the school. These are housed in shared learning areas / classrooms and central resources areas. The library area houses a range of books to support children's individual research.

Monitoring and Review

Monitoring the standards of learning and the quality of teaching is the responsibility of Curriculum Leader. The work of Curriculum Leader also involves supporting colleagues, being informed about current developments, and providing a strategic lead and direction for this learning area within the school. The Curriculum Leader liaises with staff, the headteacher and indicate areas for improvement. This is recorded on our School Improvement Plan and shared with staff and governors termly.

This policy was compiled by Mrs S Stapley in June 2012 in consultation with all staff and the governing body. It was reviewed by Mrs Stapley in April 2015 where amendments taking account of current guidance were made. It was reviewed in June 2017.

The next review will be following statutory changes to the curriculum or Summer 2020 at the latest.