

Ballifield Primary's Design and Technology Curriculum



Energy Draws Attention

**Design is not just what it
looks like and feels like.
Design is how it works.
- Steve Jobs**



Context

The context of DT at Ballifield Primary School is that of a large urban primary school, serving children in the age range 3-11 years. Our pupils come from a range of diverse backgrounds and experiences. We recognise that our pupils will be at different starting points in relation to how much experience of designing and making they have had prior to starting school. We appreciate that some children may have engaged in a lot of craft-based activities where they may have developed practical skills, whilst others will have limited experience. We also recognise that none will have experience DT in its pure sense as a discrete subject, so much of the content will be new for all.

OUR INTENT FOR THE TEACHING OF DT AT BALLIFIELD PRIMARY SCHOOL

Purpose

The purpose of the teaching of DT at Ballifield Primary School is that we give all our children the opportunity to learn and develop knowledge and skills in **designing, making** and **evaluating** products. We follow a clear step-by-step process in all units of work across all year groups. This enables our pupils to understand that DT is product based and that products have a **purpose, audience** (user) and **function**. By the end of their time at Ballifield, children will have developed skills and confidence in these aspects of DT, as well as key competencies of **problem-solving, organisation** and **perseverance**.

Aim

The aim of the study of DT at Ballifield Primary School is that all our children, especially disadvantaged pupils, those with SEND, those who are known (or previously known) to children's social care, and those who may face other barriers to their learning and/or well-being will:

- Develop their awareness of the presence and importance of design and technology in all our lives.
- Develop technological capability in order to design and make products within a meaningful context and aligned to a given 'brief', which could be open-ended (particularly for older year groups).
- Nurture an attitude of collaboration, co-operation and respect between pupils.
- Gain awareness of the role and importance of health and safety.
- Learn how to use the correct technological language, extending their vocabulary through talking and explaining through designing and making activities.
- Have opportunities to transfer skills and knowledge from linked subjects, for example measurement in maths, materials in science and the use of CAD in computing.
- Develop a sense of enjoyment and pride in their ability to make products and see their designs come to life.
- Know more, remember more and do more each time they do DT, becoming increasingly creative and innovative each time.
- Develop growing curiosity and interest in the man-made world through investigating, talking and asking questions about familiar products.

OUR IMPLEMENTATION OF THE TEACHING OF DT AT BALLIFIELD PRIMARY SCHOOL

The School Curriculum Requirements

As a maintained school in England, Ballifield Primary School is legally required to follow the statutory National Curriculum which sets out in a programme of study, on the basis of key stages, subject content for the subject of Design and Technology that should be taught to all pupils.

Time allocation for DT

The amount of time allocated to the teaching of DT at Ballifield Primary School is that it is taught **termly** to all year groups from Year 1 to Year 6. It is taught in the opposite half term to art and design. Every year group experience **three DT units per academic year**, taught **explicitly**. Teachers determine whether units of work are best taught in blocks or across multiple weeks, and how much time they give to each lesson depends on the content of the lesson and is tailored to the needs of the children in their class or project that they are undertaking.

Health & Safety in DT (CLEAPPS*)

Health and safety are paramount in DT. To ensure the safety of all children and staff. It is important that children are taught the **rules of safety** when undertaking experiments and investigations. Materials and equipment need to be **handled safely**. The teacher needs to ensure that all staff and pupils involved are aware of safety implications connected with any design and technology activity they are undertaking. Teachers must also seek guidance from CLEAPSS (<https://www.cleapss.org.uk/>) for advice on safety when carrying out activities.

Teachers should refer to: "Doing Things Safely" ([cleapss.org.uk](https://primary.cleapss.org.uk/Resources/Doing-Things-Safely/)) <https://primary.cleapss.org.uk/Resources/Doing-Things-Safely/>. This is then added to medium term plans for future reference.

*Ballifield is a member of CLEAPPS

How is DT taught?

- DT is 'product, user and purpose' based. Products are designed and made with an 'intended user' and 'intended purpose' in mind.
- All units of work are titled: Design, make and evaluate a _____ (product) for _____ (user) for _____ (purpose).
- All D&T units of work include:
 - **Investigative and Evaluative Activities** (IEAs): these sessions give children the opportunity to look at and explore products that exist already in the world. This may include handling products, constructing with products or taking products apart in to their component pieces.
 - **Focussed Tasks** (FTs): these sessions give children the chance to practise an explicit skill. Teachers model a skill and give children an array of equipment and resources to utilise. This key step builds confidence and understanding so that children can employ skills learned later in their DMEA.
 - **Design, Make and Evaluate Assignment** (DMEA): these sessions are split into three aspects. The first is the opportunity to design a product in line with a clear brief for children to follow. The second is the chance for children to make their product, following their design. They are encouraged to amend and problem-solve as they go. Finally, the last session gives children the chance to evaluate the product that they made, considering strengths as well as areas of improvement.

- **Time to redesign and re make their improved product after evaluation.**

Teaching and Learning

- DT is given shared curriculum time in all year groups with art and design.
- DT is taught as a discrete subject thus allowing specific DT knowledge, skills and understanding to be developed.
- Staff ensure that they are confident in the subject knowledge that they are teaching in advance of lessons. They seek guidance from the Subject Leader or DATA (Design & Technology Association) if necessary.
- A clear journey of learning is undertaken in DT so that children investigate and evaluate, complete focused tasks to develop skills and then design, make and evaluate their product.

Planning

- Long term plans set out the clear sequencing and coherence of the Design and Technology curriculum across each year group for the academic year.
- Class teachers ensure that the Design and Technology curriculum is implemented and followed each term.
- Teachers identify opportunities for both facilitating and extending learning, such as educational visits and visitors and whole school Design and technology projects which involve the school community and welcome parental engagement. *For example, our Year 2 glove puppet unit invites parent helpers into school to support children with 1:1 sewing sessions.*
- Medium term plans set out a coherent and well-sequence series of lessons for each unit of work. These are skills based and focus on the key fundamentals and crucial knowledge that pupils will be assessed against by their teachers.

Design and Technology Resources

- Resources are stored in the DT cupboard, which is locked at all times, only teaching staff have access to it.
- Teachers make good use of resources in order to teach to the medium-term plan and ensure pupils have the necessary equipment and resources to carry out the design brief.
- Resources are purchased each half term for the classes that are teaching DT. These are purchased via the subject lead before a specified deadline.
- Electronic resources are also used to give pupils examples of products and how to guides to fix and attach, explore structures and problem solve.

Inclusion

Design and Technology is an important and valuable subject for all pupils especially disadvantaged pupils, those with SEND, those who are known (or previously known) to children's social care, and those who may face other barriers to their learning and/or well-being. Knowledge and understanding are drawn from across the curriculum and helps to develop and enable numeracy, literacy and communication skills that can be applied in practical ways. This consolidates skills from other lessons and reinforces learning with positive outcomes.

A broad spectrum of the D&T curriculum is planned and delivered in order to accommodate and challenge pupils of all abilities. It may be necessary to provide specialist equipment, adapt room layouts, utilise adult helpers and allow additional time for tasks. Outcomes can be adjusted by teachers to ensure children can create products that fulfil their potential as designers and makers.

Provision is adapted to the needs of all pupils, especially disadvantaged pupils, those with SEND, those who are known (or previously known) to children's social care, and those who may face other barriers to their learning and/or well-being. For example, the use of different cutting tools such as scissors to suit the child's grip and enable them to cut accurately. Teachers are aware that pupils who have barriers to learning in other areas may have a strong interest in and aptitude for DT. All pupils are encouraged to progress to their full potential and a variety of teaching methods are employed to ensure that this is possible. Pupils who are very able in DT (for example, because they regularly make things in their own lives) are given opportunities to demonstrate and develop their knowledge and strengths.

EYFS

In the EYFS at Ballifield, Design and Technology sits within the areas of 'Expressive Arts and Design' part of the curriculum, bringing in elements of 'Physical Development', particularly fine motor skills. DT skills are explored in continuous provision, and practitioners encourage key language use that will aid vocabulary as they learn DT through school. This helps to develop strong foundations in communication and language. In F2's explicitly taught DT topics (linked to the food and structures topics covered further up the school), pupils will research and explore and have opportunities to design, make and evaluate their own products. Additionally, parental engagement is encouraged through junk modelling workshops.

Design and Technology and SMSC

At Ballifield, we believe that Design and Technology plays a role in the personal development of children, developing problem solving and resilience, alongside team work, communication and respect. The subject gives rise to the opportunity to make something for someone else, inline with a brief, so children learn that products can be made for others and experience the reward that comes with sharing their product with others in life.

Design and Technology and British Values

At Ballifield, we promote the fundamental British values of:

- 1. Democracy**
- 2. The rule of law**
- 3. Individual liberty**
- 4. Mutual respect**
- 5. Tolerance** of those with different faiths and beliefs

We believe that Design and Technology can make a key educational contribution to children's explorations of British Values by respecting others opinions and choices and being tolerant of others when working collaboratively. It gives children the chance to demonstrate their own individual liberty through the design and make process. Opportunities to explicit reference British Values are addressed through DT units of work where applicable.

THE IMPACT OF THE TEACHING OF DT AT BALLIFIELD PRIMARY SCHOOL

The impact of our Design and Technology curriculum will be that our children see themselves as **designers in the world**, after all they are the future citizens who will design new products and move the world forward. Through DT, our children develop the ability, confidence, key skills and crucial knowledge to evaluate existing products, design their own products (based on their interpretation of the design brief), make the product following their design and then evaluate product against the brief.

Assessment, reporting and monitoring

- Throughout units of learning, teachers recap and review previous learning to remind pupils of previous skills they have acquired and link these to their new design brief.
- Gaps are filled before new knowledge is taught and AfL is used constantly to ensure children know and remember more.
- Pupils' attainment in Design and Technology throughout the school will be tracked and monitored by the Subject Leader in order to ensure that Design and Technology provision at Ballifield is impactful. The Subject Leader will also be able to identify areas for development and children who are finding it difficult to achieve and understand the crucial knowledge. Through discussion with teachers, ways to further support children to meet the learning outcomes are devised.
- As required by law, we report pupils' attainment in Design and Technology in written form to parents once a year, specifying whether their child has met the learning outcomes taught through our Design and Technology curriculum.

Role of the Subject Leader

The Subject Leader is responsible for overseeing teaching and learning in Design and Technology at Ballifield. This role includes:

- Writing the action plan for subject development.
- Monitoring the implementation of the Design and Technology curriculum throughout school.
- Ensuring the long term and medium-term plans are followed.
- Drop in on DT lessons to talk to pupils in order to see DT in action, particularly focusing on disadvantaged pupils, those with SEND, those who are known (or previously known) to children's social care, and those who may face other barriers to their learning and/or well-being.
- Book scrutiny to look at outcomes.
- Pupil voice to ascertain whether pupils have gained crucial knowledge and key skills.
- Liaising with staff about the implementation of Design and Technology within their class.
- Order and maintain resources.
- Evaluate effectiveness of DT and its IMPACT across the school.
- Keep up to date with new initiatives and curriculum development.
- Attend subject leader meetings termly via Learn Sheffield.
- Review the DT curriculum annually and make any necessary adjustments.

Policy date: November 2025

Policy review date: November 2026