and

Abbots Farm Preschool

Design and Technology Policy

January 2025

Review by January 2027

Contents:

Statement of Intent

Curiosity ⟹ Exploration ⟹ Understanding

At Abbots Farm Infant School we want our pupils to be inspired to acquire and develop a broad range of skills and understanding to design and make products. We aim to develop our children's creativity, resourcefulness and imagination when designing, investigating, analysing and evaluating in a range of relevant contexts. We strive to enable pupils to have an awareness of and interest in the impact of technology in our rapidly changing world.

Signed by:

_____ Headteacher Date: _____

_____ Subject Leader Date: _____

1. Legal framework

This policy has due regard to all relevant legislation and statutory guidance including, but not limited to, the following:

- DfE (2013) 'Design and Technology programmes of study: key stages 1 and 2'
- DfE (2024) 'Statutory framework for the early years foundation stage'

This policy operates in conjunction with the following school policies:

- Teaching and Learning Policy
- Assessment Policy
- Marking and Feedback Policy
- Health and Safety Arrangements
- Special Educational Needs and Disabilities (SEND) Policy
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2. Roles and responsibilities

The **governing body** is responsible for:

- Ensuring a broad and balanced design and technology curriculum is implemented in the school.
- Ensuring the school's design and technology curriculum is accessible to all children.

The **headteacher** is responsible for:

- The overall implementation of this policy.
- Ensuring the school's design and technology curriculum is implemented consistently.
- Ensuring appropriate resources are allocated to the design and technology curriculum.
- Ensuring all children are appropriately supported.
- Appointing a member of staff to lead on the school's approach to teaching design and technology.

The **subject leader** is responsible for:

- Preparing policy documents and supporting with curriculum plans and schemes of work for the subject.
- Reviewing changes to the national curriculum and advising on their implementation.
- Monitoring the learning and teaching of design and technology, providing support for staff where necessary.
- Encouraging staff to provide effective learning opportunities for children.
- Helping to develop colleagues' expertise in the subject.
- Organising the deployment of resources and carrying out an annual audit of all design and technology resources.
- Liaising with teachers across all phases.
- Communicating developments in the subject to all teaching staff.
- Leading staff meetings and providing staff members with the appropriate training.
- Organising, providing and monitoring CPD opportunities in the subject.
- Ensuring common standards are met for recording and assessment.
- Advising on the contribution of design and technology to other curriculum areas, including cross-curricular and extra-curricular activities.
- Collating assessment data and setting new priorities for development of design and technology in subsequent years.

The **classroom teacher** is responsible for:

- Acting in accordance with Abbot's Farm Infant School Design and Technology Policy.
- Liaising with the design and technology subject leader about key topics, resources and supporting individual children.
- Ensuring that all of the relevant statutory content is covered within the school year.
- Monitoring the progress of pupils in their class and reporting this on an annual basis.

- Reporting any concerns regarding the teaching of the subject to the subject leader or a member of the senior leadership team (SLT).
- Undertaking any training that is necessary in order to effectively teach the subject.

3. The National Curriculum

The national curriculum will be followed for all design and technology teaching.

During Reception, in accordance with the 'Statutory framework for the early years foundation stage', focus will be put on the seven early learning goals (ELGs), with the design and technology aspect of pupils' work relating to the objectives set out within the framework. The ELGs cover:

1. Communication and language: listening, attention and understanding; and speaking.
2. Personal, social and emotional development: self-regulation, managing self, and building relationships.
3. Physical development: gross motor skills and fine motor skills.
4. Literacy: comprehension, word reading, and writing.
5. Mathematics: number and numerical patterns.
6. Understanding the world: past and present; people, culture and communities; and the natural world.
7. Expressive arts and design: creating with materials; and being imaginative and expressive.

In EYFS, children will explore different materials freely, to develop their ideas about how to use them and what to make. They will develop their own ideas and then decide which materials to use to express them. They will explore ways to join different materials. They will return to and build on their previous learning, refining ideas and developing their ability to construct and represent them. Children will create collaboratively, sharing ideas, resources and skills.

During Years 1 and 2, pupils will be taught to:

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

In KS1 our Design and Technology curriculum focuses on the knowledge, understanding and skills needed to engage in process of designing and making. These skills are explicitly

mapped out and rigorously taught. Children will explore taught skills and a variety of materials through a range of creative and practical activities.

We use a cross curricular approach to learning. This helps to immerse the children within their topics, allowing them to use their new knowledge within many different subjects.

4. Cross-curricular links

Wherever possible, the design and technology curriculum will provide opportunities to establish links with other curriculum areas.

English

- Children are encouraged to use their speaking and listening skills to describe, explain and evaluate ideas and collaborate with others.
- Children's writing skills are developed through labelling, recording information and reviewing designs.
- Talk for Learning is used to encourage speaking and communication about designs.

Maths

- Children will use vocabulary involving measurement, shape and space.
- Children will apply problem solving skills to make choices in their designs and make adaptations as they construct.
- Children will use their knowledge of number and shape and skills in measurement when designing and making.

Computing

- Children will use ICT to research design ideas.
- Children are encouraged to use a variety of electrical devices, gaining confidence throughout their school experience.

PSHE

- Children will develop skills in negotiating and collaborating.
- Children will learn the importance of healthy nutritional choices.

Science

- Children will investigate and apply their knowledge about materials and their properties as they design and make

Art

- Children will explore colour and pattern to enhance and embellish their designs.
- Children will experiment with 3D sculptural form and shape as they design and construct.

5. Teaching and assessment

Lesson planning

All relevant staff are briefed on the school's lesson planning procedures as part of staff training. Planning is carried out as a year group team.

Throughout the school design and technology is taught as a discrete inputs, continuous provision and as part of cross-curricular teaching when appropriate. The statutory national curriculum content from the DfE's 'Design and Technology programmes of study: key stages 1', as outlined above, is the starting point for planning.

Planning focuses on the objectives and design skills to be taught and well as those which they can learn through discovery in continuous provision. Planning will begin by looking at prior knowledge, which will then be built on over the course of the term. Classrooms have a 'tinker' enquiry area which is used to promote exploration, practise and embedding of skills.

Long-term planning will be used to outline the programmes of study to be taught within each year group. Medium-term planning will be used to outline the vocabulary and skills that will be taught in each unit of work, identifying learning intentions and suggested learning

activities. Short-term planning will be used flexibly to reflect the intention of the lesson, the success criteria, differentiation, assessment opportunities and the aim of the next lesson, building on medium-term planning and taking into account children's needs.

Teaching

We follow a 'Teach and Tinker' approach, whereby children are taught a skill via a whole class teaching input or through an adult directed activity and then they get to 'tinker' with the skill taught through independent continuous provision activities. Our children will explore different structures and mechanisms, develop their understanding of food and nutrition and shape and join a range of textiles. The process is viewed as important as the product and children are encouraged to evaluate and improve upon their designs regularly throughout the process.

Opportunities for outdoor learning will be provided where possible.

Assessment

Children will be assessed and their progression recorded in line with the school's Assessment Policy. Assessment in design and technology will be based upon design knowledge and understanding.

Children will be assessed continually throughout the year at the end of each unit and an assessment Venn diagram completed. This will enable teachers to identify children's understanding of topics and inform their future lesson planning. All assessments will be passed to relevant members of staff, such as the child's next class teacher.

Assessment will take various forms, including the following:

- Talking to children and asking questions
- Discussing children's work with them
- Marking work against learning intentions
- Observing practical tasks and activities

Parents will be provided with a written report about their child's progress during the Summer term every year. Verbal reports will be provided at parent-teacher meetings during the Autumn and Spring terms.

6. Equipment and resources

The design and technology lead is responsible for ensuring that all resources and equipment are sufficiently maintained, and for maintaining an inventory of resources. The design and technology lead will carry out an annual audit of design and technology resources. The design and technology lead is responsible for negotiating requests from staff and ensuring resources are bought within the amount allocated in the annual budget.

7. Health and safety

Staff will act in accordance with the school's Health and Safety Arrangements at all times.

If needed a risk assessment will be carried out by teachers before design and technology related activities, e.g. use of woodworking or food preparation tools.

All children will be shown how to correctly handle tools prior to use and will be monitored by staff whilst exploring.

Accidents and near-misses will be reported following the school's reporting procedures.

Perishable food will be stored sensibly and refrigerated if necessary. Care must be taken by teachers and teaching assistants to ensure food is not used after the given sell by date

When planning cooking activities class teachers will check Arbor to ensure children's allergies are taken into account.

If any cooking or food preparation is taking place in the classroom, all surfaces will be cleaned before and after use.

8. Equal opportunities

All children will be given equal access to the entire design and technology curriculum.

Where required, children with SEND will be provided with additional support in order to fully engage with the design and technology curriculum. Opportunities for collaborative work will be planned for to enhance access for all pupils where possible.

Where it is inappropriate for a child to participate in a specific lesson because of reasons related to any protected characteristics, the lesson will be adapted to meet the child's needs and alternative arrangements involving extra support will be provided where necessary.

The school aims to provide more academically able children with the opportunity to extend their design ideas through extension activities in continuous provision such as problem solving and investigative work (tinkering).

9. Monitoring and review

This policy will be reviewed every **two years** by the **design and technology lead**, in collaboration with the **headteacher** unless there have been significant changes. The next scheduled review for this policy is **January 2027.**

Any changes made to this policy will be communicated to class teachers and other relevant staff.