Hasland Infant and Nursery School

Design and Technology Policy

Intent

At Hasland Infant School we will teach children to understand how and why products are designed and made. Our world is ever changing and we want our curriculum to keep up with and reflect these changes. It is our intention to enable the children to move with these changes and be the people that influence change.

Through design and technology our children will acquire a broad range of subject knowledge. The children will draw on disciplines such as mathematics, science, food and nutrition, engineering, computing and art. We aim to inspire, nurture and develop a new generation of engineers.

Design and Technology enables the children's ideas to come to life. As designers they will explore new techniques. They will problem solve. They will evaluate to improve their own and other people's ideas and products. They will learn to take risks. They will experience trial and error and learn that it is ok to make mistakes. Ultimately our children will become resourceful, innovative, enterprising and capable citizens.

Implementation

At Hasland Infant School our vibrant and creative curriculum is delivered through exciting topics and Design and Technology is taught throughout the year as part of each topic. We give children of all abilities the opportunities to develop their skills, knowledge and understanding of the designed and made world through whole class teaching, small group work and individual projects and activities. In Key Stage One this follows the programmes of study from the National Curriculum. In the Foundation stage it follows the objectives within the Development Matters areas of Understanding of the World and Expressive Arts and Design in Development Matters. We plan the activities in Design and Technology so that they build on the prior learning of the children. The planning and coverage ensures that the children's skills, knowledge and vocabulary are built upon throughout their time at our school.

Nursery

The children in nursery are encouraged to investigate and show interest in design by exploring a range of materials, resources and construction activities. They are encouraged to be curious about the things that they see in their environment and supported in asking questions about these and finding ways to answer these questions. The children will also learn how to use tools and equipment safely. The children have access through provision that provides opportunities to explore Design and Technology through construction and modelling experiences.

Reception

In Reception the children are still encouraged to investigate and explore materials and resources. In addition to this they are expected to explore the characteristics of everyday objects, shapes, tools and techniques and use mathematical and simple technical language to describe them. They will learn how to make their own choices about the tools and techniques they need to shape, assemble and join materials. The children do this through a mixture of planned activities and through the

structured play activities available in the classroom and outdoor learning areas.

Our EYFS curriculum will build and develop skills progressively from Nursery to the end of Reception through:

- Exploratory play
- Basic joining and fixing
- Tool handling
- Purposeful construction
- Increased fine motor skills
- Developing problem solvers, curious minds and children confident and willing to take risks.
- Explore preparing and making food
- Become aware of health and safety and hygiene.

Key Stage One

We have a creative approach towards our curriculum planning in design and technology. The National Curriculum objectives are linked to our current topic and our class projects and are used alongside the progression of skills document. Although the chance to explore and investigate is still a part of the Key Stage One curriculum the children are given more of a purpose and structure to their work. The children will often have a project to design, make and evaluate a product. The children will be given opportunities to practice skills they have learned previously and new techniques they have been shown. These are often included in the continuous provision activities around the classroom.

Our Key Stage One Design and Technology curriculum will enable our children to:

- Draw on their own and other people's experiences to generate ideas.
- Develop their design ideas through discussion, observation, drawing and modelling.
- Identify what they intend to design and make, considering a set criteria.
- Select, name and use tools and materials safely.
- Evaluate their work against their design criteria.

- Build and develop skills progressively in Key Stage 1
    - Using a template
    - Drawing and cutting, shaping, joining and finishing
    - Building and creating strong and sturdy structures
    - Create and use mechanisms including
        - Levers
        - Sliders
        - Winders
        - Wheels and axels
    - Understand the origins of certain foods
    - Begin to understand what a balanced diet might mean
    - Use recipes to create food products.
    - Use their understanding of health and safety and hygiene

Health and Safety

- Teachers teach the safe use of tools and equipment and insist on good practice prior to use: including safe contact with sharp objects including fabric, needles, scissors, knives etc.
- Glue guns are only used and handled by staff and are out of reach of children.
- Teachers use judgement based on the risks of the task and the tools to decide on the level of supervision and use this to ensure children are safe.
- Safe handling of food: all children need to ensure that they are aware of personal hygiene rules such as thorough hand washing and wearing of aprons before handling food.
- All staff in food lessons are aware of food allergies and manage this with strict safety protocols based on the child's allergy plan.
- Teachers are aware of related anxieties that need to be managed sensitively.

SEND

At Hasland Infant School, we are an inclusive school that promotes the wellbeing, happiness and progress of every child. All pupils are entitled to a high-quality, ambitious curriculum that meets their social, emotional and learning needs. To support access to all foundation subjects, subject leaders, the SENDCo and the Inclusion Support Advice Teacher have developed 'SEND in My Subject' documents. These provide guidance on adaptations across the four areas of need and are referenced within medium-term planning. We recognise that every child is unique, and while these documents support planning, adaptations are tailored to meet individual needs.

EAL

We recognise that children with English as an Additional Language (EAL) bring valuable linguistic and cultural experiences to their learning. Within our subject teaching, we ensure all children can succeed by providing inclusive teaching, clear modelling, visual support, intentional vocabulary teaching and opportunities for meaningful talk. Any barriers to language and understanding are identified and addressed so that children with EAL can access the full curriculum, participate confidently and demonstrate what they know and can do.

Links with the community

Wherever possible and relevant we will make links and engage with the community in order to further support and enhance our design and technology curriculum. This may involve inviting experts in design or product making into school to share their expertise with the children. This can be to support a particular topic and will therefore be specific to a year group.

Roles and responsibilities

Subject leader will:

- Review and develop the school design and technology policy
- Monitor progress in Design and Technology and advise the Head Teacher on action needed.
- Take responsibility for the purchase and organisation of central resources for Design and Technology.
- Keep up to date with developments in Design and Technology education and share with colleagues as appropriate.
- Monitor lesson plans to ensure coverage, differentiation and that lesson have appropriate learning objectives and success criteria.

Teachers will:

- Share and refer to the learning objectives and the success criteria with the children during each session.
- Follow the appropriate planning
- Tailor planning to the needs of children in their class using their teacher judgement.
- Ensure children with SEND access lessons appropriately.
- Ensure they understand health and safety related to the lesson and ensure supervision matches the risks.
- Ensure allergies and medical conditions are managed with extreme care.
- Use a variety of teaching styles to address all of the children's preferred learning style.
- Record assessments using whole school assessment booklets
- Provide opportunities in provision for children to secure or apply the knowledge learned.

Impact

Assessment is an integral part of teaching and learning and at Hasland Infant and Nursery school we encourage children to be involved in this process as much as possible. We ensure that they have a clear understanding of their learning objectives. The children will be asked to talk about their work, the work of their peers and that of other designers. Children are encouraged to assess and evaluate both their own work and that of other children.

Children are assessed throughout the year using the school assessment booklet and teachers use this to identify gaps in learning. Teachers also assess children within and after lessons and use this to inform the level of support needed and their next steps.