

Wallsend Jubilee Primary School Design and Technology Curriculum Statement

At Wallsend Jubilee Primary School, we want every child to be happy and enthusiastic learners of Design and Technology, and to be eager to achieve their very best in order to fulfil their talents. We firmly believe that the recipe for success is high quality first teaching in Design and Technology, which is central to the life of our happy, caring school. We want all of our children 'To be the best that they can be.'

At Wallsend Jubilee Primary School, we encourage children to use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. We aim to, wherever possible, link work to other curriculum areas such as mathematics, science, engineering, computing and art. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and are encouraged to become innovators and risk-takers. As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Children learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. They evaluate notable designers and existing products to inspire them to create their own ideas and designs. Children use their creativity and imagination to design and make products that solve problems in a range of contexts.

Intent - What we are trying to achieve?

- Our principal aim is that children leave Wallsend Jubilee Primary School with a wide range
 of happy and rich memories in Design and Technology formed through interesting and
 exciting experiences driven through opportunities that enhance a child's awareness of their
 own abilities and strengths as a learner; thus, ensuring that children see learning in Design
 and Technology as an on-going process not a one-off event.
- Children will meet the National Curriculum expectations in Design and Technology, which will be taught by highly-qualified, enthusiastic staff who will support children to develop mastery of concepts and inspire enthusiasm and interest in the subject.
- All children will study Design Technology for 8 hours per term.
- Opportunities will exist for children of all ages to experience learning beyond the classroom.
- Children will develop a deep understanding of the subjects they are studying. They will
 increasingly use their prior knowledge to solve problems and develop the sophistication of
 Design and Technology.
- Children will understand how our 6Rs of learning and British Values relate to Design and Technology.
- In Design and Technology, children will develop planning and communication skills, including presenting ideas, produce meaningful and quality products and be reflective of their processes and outcomes.
- Children will develop a real understanding and appreciation of the world learning from the best that has been developed and said. For example, architects, chefs or engineers.

Characteristics of a Designer

- Significant levels of originality and the willingness to take creative risks to produce innovative ideas and prototypes.
- An excellent attitude to learning and independent working.
- The ability to use time efficiently and work constructively and productively with others.
- The ability to carry out, thorough research, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs.
- The ability to act as responsible designers and makers, working ethically, using finite materials carefully and working safely.
- A thorough knowledge of which tools, equipment and materials to use to make their products.
- The ability to apply mathematical knowledge.
- The ability to manage risks exceptionally well to manufacture products safely and hygienically.
- A passion for the subject and knowledge of, up-to-date technological innovations in materials, products and systems.

Implementation – How do we translate our vision into practice?

- The curriculum hours in Design and Technology are non-negotiable and will be followed by all staff in the school. Fixed timetables will be set before the academic year and monitored by the Senior Leadership Team of the school.
- We are able to contact Burnside Collage for advice and support to help aid the transition into Key Stage 3.
- The subject leader for Design and Technology will meet the senior leadership team on an annual basis to evaluate provision in order to ensure that teaching and learning in Design and Technology is outstanding. Where necessary, staff will receive coaching and training in Design and Technology.
- Carefully designed schemes of learning in Design and Technology ensure consistency and progress of all learners.
- Success criteria in every Design and Technology lesson are set in order to guide children to achieve their potential. This ensures work is demanding and matches the aims of the curriculum.
- High quality teaching responds to the needs of children. Pre and post formative and summative assessments are used alongside teachers actively marking work in lessons in order to identify misconceptions.
- Teaching in drawing skills will be focused on and students will be able to draw a range of 3D shapes accurately and using a ruler.
- Presentation skills be will taught to ensure that students are taking pride in their design
 work and in work that may be shared as part of a whole class activity. Children should be
 confident in explaining their design work to peers and teachers and acknowledge feedback
 as a measure of driving work and progress forward and not a criticism to hold on to.
- Students will have a clear understanding of basic health and safety procedures and how this is linked to the equipment that they use during practical sessions.
- In Design and Technology students will be confident when using equipment and understand and explain simple manufacturing processes that have been taught when completing any practical element.
- An understanding of different material areas should also be covered in relation to; Textiles (Fabrics), Product Design (Wood/Plastic/Metal), Graphics (Paper, Board and Printing) and Food (Ingredients) gifted and talented students should be pushed for specific material names and link them to the correct material area.
- Actively promoting aspirations for the future. Children develop an understanding of how subjects and specific skills are linked to future jobs.

Here are some of the jobs you could aspire to do in the future as a Designer:

- Sound engineer
- Theme park designer
- · Videogames studies researcher
- Lego designer
- Architect
- Jewellery designer

Cultural Capital

- Children will learn about key figures and design work and become increasingly more familiar with those who have successfully developed creative, technical and practical expertise within Design and Technology.
- Through visits and visitor experience become increasingly familiar with Design career opportunities available in the work place
- Visit to at least one local gallery and museum

Impact – What is the impact of our curriculum on the students?

- Children are happy learners within Design and Technology. They experience a wide range of learning challenges within the art and know appropriate responses to them. Children will enhance their problem-solving skills and use their resilience to ensure that work is amended rather than started again.
- Through Design and Technology children deepen their appreciation for the 6Rs for learning.
- Visits within Design and Technology have enriched the lives of the children and they are able to discuss how the experience impacted their knowledge and understanding.
- Children of all abilities and backgrounds achieve well in Design and Technology reflected in outstanding progress that reveals a clear learning journey. Children talk enthusiastically about their learning in Design and Technology and are eager to further their learning in the next stages of their education.
- Clear outcomes focus and guide all Design and Technology development plans and drive improvement.
- Fundamental British Values are evident in Design and Technology and children understand how it can celebrate difference.
- Through wider reading in Design and Technology, children will be exposed to a range of design work influenced by different design areas such as; Architecture, Chefs, Fashion Designers, Car Designers and Product Designers. (This could be achieved through looking at different media's such as news published online, magazines or Design books.)
- Through this exposure, children will produce work and 'Be the best that they can be.'

It is through the planning and provision of a broad and balanced design and technology curriculum that pupils are encouraged to investigate, plan, adapt and evaluate their own work, to help them appreciate design as being a dynamic and ever-changing process. Pupils learn to consider purpose and audience. Within projects pupils work independently and collaboratively, which develops their co-operation and understanding of people having different areas of strength and expertise. Pupils develop a knowledge and understanding of materials, mechanisms and structures, in order to make informed decisions relating to their products. They also learn how to use a variety of tools in a safe and supervised environment. Throughout their design and technology work children are supported in becoming reflective learners, celebrating their successes and learning from their experiences.