

Art and Design Technology Rationales

Art Rationale

National Curriculum Aims for Art

The national curriculum for art and design aims to ensure that all children:

- produce creative work, exploring their ideas and recording their experiences
- become proficient in drawing, painting, sculpture and other art, craft and design techniques
- evaluate and analyse creative works using the language of art, craft and design
- know about great artists, craft makers and designers, and understand the historical and cultural development of their art forms.

National Curriculum Purpose for Art

Art, craft and design embody some of the highest forms of human creativity. A high-quality art and design education should engage, inspire and challenge children, equipping them with the knowledge and skills to experiment, invent and create their own works of art, craft and design. As children progress, they should be able to think critically and develop a more rigorous understanding of art and design. They should also know how art and design both reflect and shape our history, and contribute to the culture, creativity and wealth of our nation.

Intent	Implementation	Impact: to be reviewed at the end of each academic year
<p>At Follifoot and Spofforth schools we believe that children should learn and master techniques thereby enabling them to create their own art work.</p> <p>These techniques will include drawing painting and sculpture with a range of materials.</p> <p>Children will also learn about, respond to and evaluate the work of famous artists.</p> <p>They will make comparisons between the work of different artists and their own work.</p> <p>Utilising English and speaking and listening skills.</p> <p>Children will use art to express their ideas.</p>	<p>In Follifoot and Spofforth Schools teachers plan sequences of learning that challenge and build upon prior skills.</p> <p>Developing and deepening understanding of art techniques and the opportunities to put them into practice are key to our curriculum.</p> <p>Children will be given the understanding of how to improve their techniques within a lesson .</p> <p>Progression of these skills is key to our curriculum and the sequence of teaching shows this.</p> <p>Work from famous artists is taught through links to other curriculum areas, We also take the opportunity to explore our art rich local environment, (Yorkshire Sculpture Park, Hockney at Salts Aire Mill.)</p>	

Art Rationale

The study of art at primary schools will help children to express their ideas in another form. The children will gain a comprehensive range of techniques which are sequentially built upon, to enable them to show their ideas in a wide range of materials and styles. Using the three elements of drawing, painting and sculpture each pupil is given the opportunity to experiment and to hone their control, whilst encouraging creativity.

Children will discuss, give preferences, find similarities and differences between both their own work and that of famous artists. They will continue to use perspective and judgement and they will use critical thinking throughout . Speaking and listening skills are a key element to our art curriculum. Links to history are key as art is also used as an artefact.

Our culture rich local environment will play a key role, celebrating the work of local artists such as Henry Moore, Barbara Hepworth and David Hockney.

Enquiry in Art

Children will explore the work of different artists and compare it. They will give preferences and develop the vocabulary and understanding to discuss pieces using technical language such as shade and texture. They will reflect on the work of others and their own. Using the work of local artists children will understand how their environment can influence works of art.

Creativity in Art

Creativity and knowledge will work symbiotically to enable the children to express themselves in a variety of media. Their work will also explore and be influenced by the style of other artists. Children will be encouraged and enabled to show themes and feelings through their work and to be able to discuss this.

Knowledge in Art Substantive knowledge concerns the key facts, concepts, principles and explanatory frameworks in a subject. Disciplinary Knowledge needed in order to think, process and understand with the subject.

Substantive knowledge in art is based on the knowledge of the 7 elements of art. Although not directly taught at primary level, the children will also develop an awareness of the 7 principles of art

7 Elements of Art	
Element	Definition / Explanation
Line	A line is an element of art. It is a mark made upon a surface. In order to be a line, the mark's length must be longer than its width. There are many different types of lines, including horizontal, vertical, wavy, diagonal, and more.
Shape	Shapes are areas of enclosed space that are two-dimensional. Shapes are flat, and can only have height and width. The two different categories of shapes are: geometric and organic. Geometric shapes are mathematical, like circles and squares. Organic shapes come from nature, like clouds and leaves. This collage by Henri Matisse uses a collection of organic shapes.
Colour	Colours have three main characteristics— hue (blue, red, green, etc.), value (spectrum of light and dark) and intensity (spectrum of bright and dark) — all contributing to what the colour communicates and how it is used. Artists vary the value and intensity of colour to create contrast within a composition.
Form	<p>A form is a shape in three dimensions, and, like shapes, can be geometric or organic.</p> <p>Geometric forms are forms that are mathematical, precise, and can be named, as in the basic geometric forms: sphere, cube, pyramid, cone, and cylinder. A circle becomes a sphere in three dimensions, a square becomes a cube, a triangle becomes a pyramid or cone.</p> <p>Geometric forms are most often found in architecture and the built environment, although you can also find them in the spheres of planets and bubbles, and in the crystalline pattern of snowflakes, for example.</p> <p>Organic forms are those that are free-flowing, curvy, sinewy, and are not symmetrical or easily measurable or named. They most often occur in nature, as in the shapes of flowers, branches, leaves, puddles, clouds, animals,</p>

	the human figure, etc., but can also be found in the bold and fanciful buildings of the Spanish architect Antoni Gaudi (1852 to 1926) as well as in many sculptures.
Value	Value refers to the visible lightness or darkness of a colour. Value is relevant to the lightness or darkness of any colour, but its importance is easiest to visualize in a work with no colours other than black, white, and a grayscale.
Texture	There are many ways to categorize texture, but the main two forms are actual and visual. Actual, or physical texture, refers to the real tactile properties of a design. Think about this type of texture in terms of designing a wedding invitation – the thickness, weight (heavy or light), and feeling of the paper (smooth, rough, etc.), along with additional embellishments (glitter, flowers, etc.), all contribute to the overall feeling or mood about the invitations design. Visual texture is the illusion of texture, created by other design elements. Examples of this can be seen in photographs, paintings, and drawings
Space	In art, space refers to how a piece of artwork is organized – the area above, below, and within components of a piece. The relationship between these areas — foreground, background, and middle ground — is strategically utilized by artists to give the illusion of depth to a flat surface.

Although not directly taught at primary level, the children will also develop an awareness of the 7 principles of art.

7 Principles of Art	
Principle	Definition / Explanation
Balance	<p>Balance refers to the visual weight of the elements of the <u>composition</u>. It is a sense that the painting feels stable and "feels right." Imbalance causes a feeling of discomfort in the viewer.</p> <p>Balance can be achieved in 3 different ways:</p> <ol style="list-style-type: none"> 1. <i>Symmetry</i>, in which both sides of a composition have the same elements in the same position, as in a mirror-image, or the two sides of a face. 2. <i>Asymmetry</i>, in which the composition is balanced due to the contrast of any of the elements of art. For example, a large circle on one side of a composition might be balanced by a small square on the other side 3. <i>Radial symmetry</i>, in which elements are equally spaced around a central point, as in the spokes coming out of the hub of a bicycle tire.
Contrast	Contrast is the difference between elements of art in a composition, such that each element is made stronger in relation to the other. When placed next to each other, contrasting elements command the viewer's attention. Areas of contrast are among the first places that a viewer's eye is drawn.
Emphasis	Emphasis is when the artist creates an area of the composition that is visually dominant and commands the viewer's attention. This is often achieved by contrast.
Pattern	Pattern is the uniform repetition of any of the elements of art or any combination thereof. Anything can be turned into a pattern through repetition. Some classic patterns are spirals, grids, weaves. For examples of different pattern types see the Artlandia Glossary of Pattern Design. A popular drawing practice is Zentangles, in which an abstract or representational outline is divided into different areas, each of which contains a unique pattern.
Rhythm	Rhythm is created by movement implied through the repetition of elements of art in a non-uniform but organized way. It is related to rhythm in music. Unlike pattern, which demands consistency, rhythm relies on variety.
Unity Variety	Unity/Variety You want your painting to feel unified such that all the elements fit together comfortably. Too much unity creates monotony, too much variety creates chaos. You need both. Ideally, you want areas of interest in your composition along with places for your eye to rest.

Through their curriculum experience children will work through a range of disciplines: drawing, painting, printing, texture, collage, 3D work and digital art in order to explore the 7 elements.

Substantive knowledge is also the knowledge of known artists, their style and period of art.

Disciplinary knowledge in art is the interpretation of the elements, how they can be used and combined in order to create a specific and desired effect. It is also the critical evaluation of artists work; evaluating style and technique and having the ability to appraise a piece of work.

Assessment in Art

Tracking children's progress throughout their school life is vital in order to establish their acquisition of knowledge and skills. At the Federation of Follifoot & Spofforth, learning always starts with the children's prior knowledge and any misconceptions they may have. Class teachers decide upon the most appropriate age related way of obtaining the children's prior knowledge. Units of work are then personalised to the children.

Misconceptions that arise throughout the unit are identified and addressed appropriately by the teacher. As a Federation we are currently trialling exploring and trialling approaches to assessing children's recall of their learning to assess how effectively knowledge and skills have been embedded and mastered.

Art and Design Technology

Rationales

Design Technology Rationale

National Curriculum Aims for Design Technology

The national curriculum for art and design aims to ensure that all children:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook

National Curriculum Purpose for Design Technology

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, children design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Children learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Intent	Implementation	Impact: to be reviewed at the end of each academic year
<p>At Follifoot and Spofforth schools we believe that children should learn and master techniques thereby enabling them to create their own design technology work. These techniques will include; measuring, cutting, joining, fixing and finishing.</p> <p>Evaluating the processes at different stages such a planning, and making are key skills children will learn.</p> <p>Design and technology is taught throughout the school through deliberate practice in a supportive environment. This enables children to improve their fluency leading to mastery of design and technology and an alteration to LTM.</p> <p>To provide children with the knowledge to develop ideas from a plan, to making a product and then to evaluate what they have made. Ensure the design and technology curriculum builds children's knowledge of a range of materials and how they can be manipulated to create useful products for a specific purpose.</p>	<p>In Follifoot and Spofforth Schools teachers plan sequences of learning that challenge and build upon prior skills.</p> <p>Developing and deepening understanding of art techniques and the opportunities to put them into practice are key to our curriculum.</p> <p>Children will be given the understanding of how to improve their techniques within a lesson . Progression of these skills is key to our curriculum and the sequence of teaching shows this. Work from famous designers and engineers is taught through links to other curriculum areas, We also take the opportunity to explore design inn our environment including equipment in and around school such as our trim trail and balance equipment as well as familiar everyday equipment such as the children's scooters and pedal bikes.</p>	

Design Technology Rationale

The fundamental role of design and technology in our Federation lies in allowing children the opportunities to apply their creativity and their imagination to create products to solve real and relevant problems. Design and technology allows children opportunities to their own needs and wants along with the needs, wants and values of others when creating new products.

Design and technology is an evaluative subject and children are given the chance to draw on the disciplines of other subjects, including mathematics, science.

"High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation."

National curriculum, 2014

Knowledge in Design Technology Substantive knowledge concerns the key facts, concepts, principles and explanatory frameworks in a subject. Disciplinary Knowledge needed in order to think, process and understand with the subject.

Substantive knowledge in design technology is based on the knowledge of four key elements of the process of design (design, make, evaluate and technical knowledge). All of these elements are taught in all year groups. They are:

Design	Know how to design a product that is purposeful, functional and appealing to a specific group and or brief.
Make	Know how to safely and carefully cut, join and finish a range of materials, including paper, wood and plastic with increasing accuracy.
Evaluate	Know how to investigate, evaluate and analyse a range of products and their own designs based on a specific criteria. Know key individuals have helped to shape the world in which we live in e.g. James Dyson, William Caxton, Tim Burness Lee
Technical knowledge	Know how to apply their knowledge of materials to meet the criteria above in the design, make and evaluate stages. Use technical vocabulary with confidence and accuracy.

Disciplinary knowledge in design and technology is the process of enabling children to use their substantive knowledge of products and materials around them to make links between and across different areas of the curriculum. Knowledge in design and technology will equip the children with the opportunity to explain how and why products have changed over time and how they might be further improved in the future. They can use their knowledge and understanding to suggest how existing products may be improved with the advances in modern technology. They will show they have the cultural capital to become global citizens in an ever changing and technologically advancing world.

Creativity in Design and Technology

"Creativity is the act of turning new and imaginative ideas into reality, the tendency to generate or recognise ideas, alternatives or possibilities that may be useful in solving problems, communicating or in finding gratification or entertainment."

P. Woodward, TES 2016

"Using creativity and imagination, children design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values."

National Curriculum, 2014

There are many opportunities for children to demonstrate their creativity in design and technology. This can be through the design phase, the making phase – where they make additions or alterations to their plan, or during the evaluation phase where they can think how the product may be further improved. It is a subject which has wide ranging opportunities for natural cross-curricular learning, whether that be through planning using exploded or cross-sectional diagrams, scientific investigation into the properties of different materials in a range of situations, the historical changes in technology and the advancements made by specific individuals, or detailed mathematical measurements of lengths and angles.

British Values

Design and technology develops children's understanding of British Values and how to express themselves in a respectful way. From substantive knowledge of how to follow rules when using tools to stay safe to providing children the opportunities to explore their own individual liberty through expressing themselves through the design process children will see how British Values are interweaved through the whole design and technology curriculum.

Enquiry in Design Technology

Children will explore the work of different designers and compare it. They will give preferences and develop the vocabulary and understanding to discuss pieces using technical language. They will reflect on the work of others and their own.

Assessment in Design Technology

Tracking children's progress throughout their school life is vital in order to establish their acquisition of knowledge and skills. At the Federation of Follifoot & Spofforth, learning always starts with the children's prior knowledge and any misconceptions they may have. Class teachers decide upon the most appropriate age related way of obtaining the children's prior knowledge. Units of work are then personalised to the children.

Misconceptions that arise throughout the unit are identified and addressed appropriately by the teacher. As a Federation we are currently trialling exploring and trialling approaches to assessing children's recall of their learning to assess how effectively knowledge and skills have been embedded and mastered.