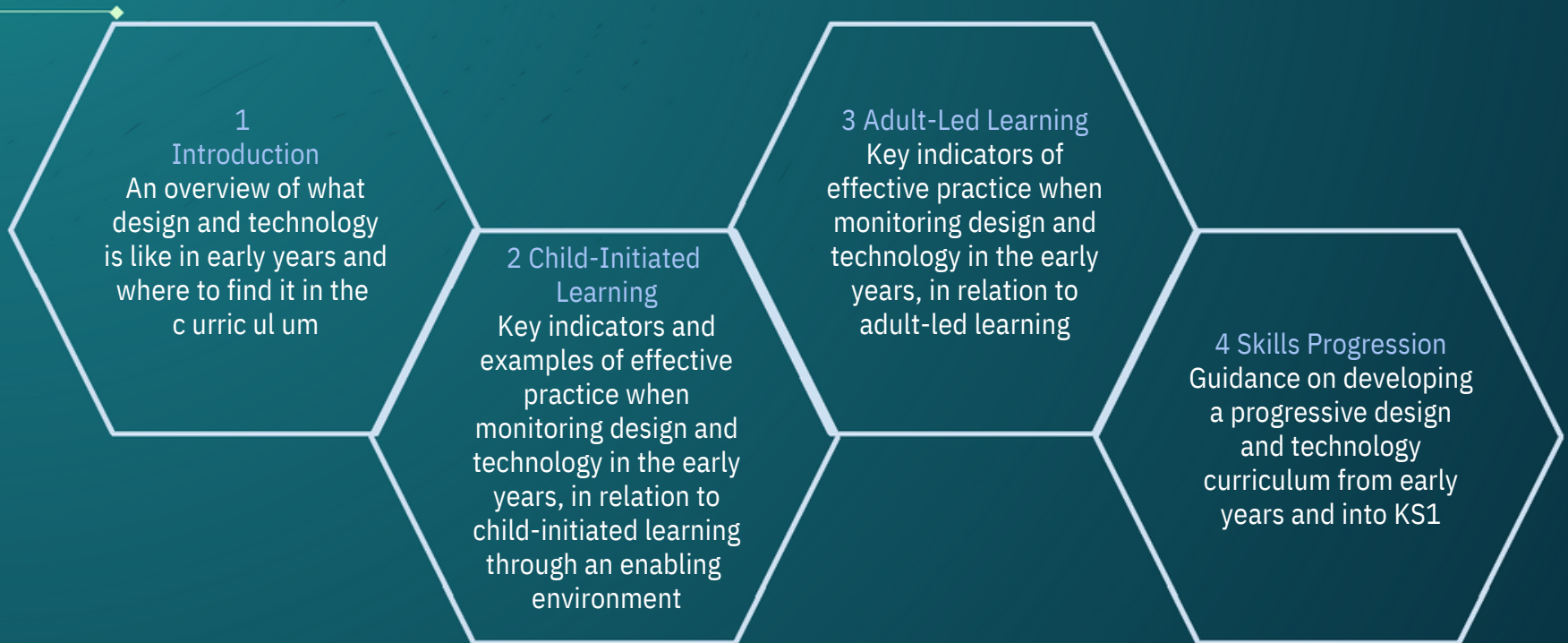


Design and Technology in Early Years

At Malvern Wells CE Primary School

Design and Technology in Early Years





“Design and technology is a practical and valuable subject. It enables children and young people to actively contribute to the creativity, culture, wealth and well-being of themselves, their community and their nation. It teaches how to take risks and so become more resourceful, innovative, enterprising and capable.”

Design and Technology Association



1. Introduction

An overview of what design and technology is like in early years and where to find it in the curriculum

Introduction



Design and technology lends itself to being taught as part of a rich, broad EYFS curriculum since it is practical and hands-on. It enables young children to be creative, take risks and be resourceful, innovative, enterprising and capable. All fundamental skills for later learning and life in the 21st Century.



1.

Design and technology in Early Years will be taught through a combination of a well-planned learning environments alongside the teaching of specific design and technology skills delivered through playful adult-led activities.

2.

Design and Technology in the EYFS Framework falls across a number of areas of learning including Physical Development and Expressive Arts and Design. In addition, aspects within Communication and Language and Personal, Social and Emotional Development are linked as part of children being able to evaluate and improve their work. The Characteristics of Effective Teaching and Learning are threaded through all aspects of learning and are the fundamental ways in which children within EYFS learn.

EYFS Design and Technology -Early Learning Goals

Fine Motor Skills

- Use a range of small tools, including scissors, paint brushes and cutlery
- Begin to show accuracy and care when drawing

Creating with Materials

- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function
- Make use of props and materials when role playing characters in narratives and stories.
- Share their creations, explaining the process they have used

Speaking

- Express their ideas and feelings about their experiences using full sentences
- Listening, Attention and Understanding
- Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions
- Make comments about what they have heard and ask questions to clarify their understanding

Managing Self

- Understand the importance of healthy food choices

EYFS Design and Technology –Educational Programmes



Expressive Arts and Design The development of children’s artistic and cultural awareness supports their imagination and creativity. It is important that children have regular opportunities to engage with the arts, enabling them to explore and play with a wide range of media and materials. The quality and variety of what children see, hear and participate in is crucial for developing their understanding, self-expression, vocabulary and ability to communicate through the arts. The frequency, repetition and depth of their experiences are fundamental to their progress in interpreting and appreciating what they hear, respond to and observe.

Child-Initiated Learning

Key indicators and examples of effective practice when monitoring design and technology in the early years, in relation to child-initiated learning through an enabling environment



An Enabling Environment for Design and Technology -Art and Craft

What might I see children doing?

- Using resources for a desired purpose, e.g. a box for a basket.
- Combining materials and resources, e.g. using a glue gun to combine
- Using colour and materials to change the appearance of a creation.
- Planning how to approach a task.
- Reviewing and making adaptations to a model.
- Explain what materials they are using and why.
- Using scissors to change materials.



An Enabling Environment for Design and Technology -Cookery

What might I see children doing?

- Measuring out ingredients using standard and non standard measures.
- Washing hands, cleaning surfaces and equipment.
- Talking about what it means to be healthy.
- Use vocabulary around taste, smell, texture and feel.
- Combining ingredients for a purpose.
- Follow simple visual instructions.
- Make links to previous learning and experiences, e.g. this smells like Christmas.



An Enabling Environment for Design and Technology -Construction Area

What might I see children doing?

- Connecting blocks, including lego and duplo, to create models.
- Explaining their models, e.g. What they are, how they work, what they do.
- Exploring connectable resources, e.g. stickle bricks, clics, Knex, gears, exploring different ways to combine to achieve a goal.
- Recreating real life objects into small scale creations, e.g. building an igloo or house.
- Adapting and changing creations to overcome a problem.
- Exploring the mechanisms of their products.



An Enabling Environment for Design and Technology -Sand

What might I see children doing?

- Using sand to create 3D structures.
- Adding objects to creations to provide detail.
- Giving reason for the details added to creations.
- Exploring wet and dry sand and explaining which is best for their creations.
- Building products to transport sand.



An Enabling Environment for Design and Technology -Outdoors

What might I see children doing?

- Creating models and structures using natural materials.
- Combining large scale construction materials.
- Creating products which move.
- Supporting in the building of resources to support wildlife, e.g. bird feeders, bug hotels, hedgehog homes.



Adults Scaffolding Learning During Child-Initiated Activities

What should I see adults doing?

- Observing children and responding to their fascinations
- Responding to their ideas and suggestions
- Suggesting possibilities to extend their thinking
- Offering additional stimulus and resources when appropriate
- Playing alongside children to take learning forwards, suggesting ideas and showing what's possible
- Play alongside, or in small organised groups to model language, correct and/or extend vocabulary
- Sharing their own experiences and making suggestions
- Role modelling thinking aloud and commenting
- Modelling how to use equipment and resources
- Posing questions and/or 'ponderings' to stimulate ideas and add challenge e.g. What could you use instead? I wonder how? Tell me why?
- Using and introducing language and vocabulary linked to key learning

Adult-Led Learning

Key indicators of effective practice when monitoring design and technology in the early years, in relation to adult-led learning



What should I expect to see when adults are leading a design and technology activity?

- Adults setting an intention for learning that is well-matched to the developmental stages of the children; building on the physical skills children already have.
- Adults guiding learning through playful, experiential activities which are presented in imaginative ways, are hands-on and require active participation from the children.
- Activities and experiences that are as open-ended as possible to allow for children to respond in different ways, following their own ideas.
- Activities and experiences delivered with individual children, or small groups of children depending on the activity and the age of the children.
- Adults using resources and materials that children are familiar with and have access to in their child-initiated learning.
- Sensitive interaction through open-questioning, modelling planning, drawing, creating and reflecting..