Design Technology at Sir Alexander Fleming

Planning Inclusive Lessons

Design and technology is an essential means of creative expression that can boost self-esteem and gives the skills required to develop and communicate personal ideas, observations, and creations. When planning schemes of work, teachers consider how to make the curricular goals in design and technology accessible and inclusive for all learners. Potential barriers to learning for individuals are anticipated alongside a pathway to ensure these learners can actively participate in the best possible way. Planning clearly identifies what children and young people will learn. Teachers consider factors that support each learner's needs, and factors that may inhibit or prevent learning such as use of equipment, environmental sensitivity risks, gaps in knowledge of vocabulary or processes. Teachers are also mindful of how to balance adult support alongside opportunities for independent learning, ensuring that tasks are broken down and build incrementally. The range of pedagogical approaches that design and technology can offer, is useful for many learners to overcome some of the barriers that may present themselves in other curriculum areas. Allowing learners to thrive and enjoy the prospect of expressing their ideas in ways that are unique to them.

Creating an Inclusive Environment

The benefits of design and technology can have a profound effect on children. It is vital to carefully consider classroom spaces and the learning environment to ensure all children can fully access the curriculum. There can be challenges for children with physical and sensory issues, as well as for those with self-regulating behaviours. At Sir Alexander Fleming teachers consider the layout of the room and seating. Considerations are made to ensure the needs of all pupils are met, for

example, children with a physical disability have the appropriate space to work, children who struggle with fine motor skills have a broader resource base and children with more sensory needs have access to adapted visual or auditory aids. Some children's needs can lead them to struggle to work as part of a group and they may benefit from working more individually. At Sir Alexander Fleming we provide opportunities for discussion time where all children feel safe to voice their ideas. We encourage experimentation, as this gives the opportunity to develop ideas and understand that there is not one correct way to design and produce a piece of work. As part of our design and technology lessons, we allow children to research different design skills alongside teaching children how to put these skills into practice to support children and to develop their knowledge, skills and confidence.

How do we support learners who struggle with attention?

Consider positioning of children to maximise engagement.

Break lesson into manageable chunks.

Pre-expose children to lesson content.

Give children time to research and use prior knowledge to make links.

All movement breaks and time to self-regulate.

How do we support learners who struggle retain vocabulary?

Discuss key vocabulary.

Display key vocabulary and meaning.

Provide visual word banks.

Teacher will consistently use correct vocabulary during design and technology lessons.

How do we support learners who struggle with fine motor skills?

Provide adult guidance and support.

Use specialised tools to support e.g. scissors.

How do we support learners who need additional time to develop conceptual understanding?

Use pre- teaching.

Model and demonstrate each element.

Share good examples.

Visual aids to support

Teaching considerations		
Early years	Key stage 1	Key stage 2
Opportunities develop fine motor skills Begin to explore range of media Begin to develop independence New vocabulary to be discussed and displayed	Opportunities to further develop fine motor skills Broaden the range of media Develop independence Practical activities should be accompanied by visual resources New vocabulary to be discussed and displayed Record designs	Expand knowledge of design and technology techniques Record and annotate designs Begin to appreciate art and artists Experiment and revisit design and technology techniques

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