



Supporting children with SEND in Design and Technology



Maintaining an inclusive learning environment

- The benefits of Design and Technology can have a profound effect on learners, not only through developing knowledge of design and technology and its associated practices but, in addition, the cultivation of **self-confidence that the nurturing of creativity can bring**. In this sense, it is vital to carefully consider the classroom spaces and the learning environment to ensure all learners can fully access this curriculum area.
- Consider the practical layout of the room and seating.
- Do learners with a physical disability have the appropriate space to work?
- Do learners who struggle with fine motor skills have a broader resource base?
- Do learners with more sensory needs have access to adapted visual or auditory aids?
- Some learners' needs can lead them to struggle to work as part of a group and they may benefit from working more individually. Build in plenty of discussion time where all learners feel safe to voice their ideas. Explain how experimentation is an opportunity to develop ideas and that there is not one correct way to do this. Provide a variety of model examples to support learners and develop their skills and confidence. As a further part of planning, always test a practical task before a lesson, as this can pinpoint techniques that may need to be adapted.
- There may be circumstances when pre-teaching can be planned to ensure a learner or group has access to new vocabulary, information or resources before the lesson takes place. This will help those who may struggle to engage, in that they are prepared for the lesson experience

EYFS

- A range of modelling and creative materials offer a range of techniques over time
- Giving every child a choice of activity is crucial for children with SEND, to make sure that they're not partaking in something that they don't want to. By showing the child one activity and then another, you can see which they are more drawn towards.
- However too much choice could be a stressor for these children and this is where understanding every child as an individual is so crucial.

Key Stage 1

- Key Stage 1 builds upon what was learnt in EYFS with further opportunities given to develop fine motor skills, experiment with a broader range of media and become more independent.
- There should be regular opportunities for learners to practise their fine motor skills through making using a variety of media, as well as regular opportunities to experiment, for example construction-based activities.
- Practical activities should be accompanied by visual resources including videos, photos or examples of real-life applications of DT.
- Additionally, any new vocabulary should be introduced, displayed and used in context by adults regularly. Equipment should be broad-based, so that all can access the lesson. Independence should be nurtured.

Key Stage 2

- Key Stage 2 builds upon and expands learners' knowledge of design and technology, providing them further opportunities to learn the subject.
- DT folders are used to record observations and experiment with ideas; all learners benefit from being taught and modelled how to make annotations, sketch, collage, mock-up and final outcomes. The contextual side of DT is expanded upon to include the work of real designers and leaders in STEM.
- Learners will start to develop an appreciation of artists and designers as they look at similar and different ways technology has evolved across time and the associated, historical contexts.
- Learners will continue to experiment and revisit DT techniques and methods to improve their mastery allowing them to be confident with their experimentation and expression of ideas.

Strategies to Support Learners with SEND	
Supporting learners who struggle to access lessons because of literacy difficulties?	<ul style="list-style-type: none"> • Provide visual aids to enable learners to identify techniques and processes, as well as to identify equipment and media. • Provide a word and/or picture bank for the learner to refer to during guided and independent activities. • Use strategies such as modelling, demonstrating and imitating to support learners in understanding the step-by-step processes
Supporting learners who struggle to retain vocabulary	<ul style="list-style-type: none"> • Learners will hear and use a range of specific vocabulary including joining, design criteria and mechanism. • Discuss and display any key vocabulary together with its meaning. Practise saying them together. • Provide visual word banks that are accessible to the learners. • Ensure that the vocabulary becomes embedded by referring to it regularly during lessons and whilst modelling.
Supporting learners who struggle with fine motor skills	<ul style="list-style-type: none"> • Consider using frames or adhesives (e.g., masking tape) that hold down learners' work to surfaces in cases where learners may struggle to hold a resource in place. • Provide learners with larger scale materials to work on and gradually decrease the scale as they acquire greater control. • Encourage learners to experiment with different media, for example when drawing offer chunkier graphite sticks as well as soft 'B' range pencils, or adapted scissors. • Plan each lesson well in advance, to consider points where learners may struggle and allow for adult guidance accordingly. • Use of scissors can be a source of frustration for some learners and wider-handled or easy grip scissors can be a useful aid. • Engaging in a design and technology activity is great for helping build fine motor skills for all children.

	<ul style="list-style-type: none"> • Learners will enjoy and benefit from using malleable media such as clay or air dough.
<p>Supporting learners who struggle with attention</p>	<ul style="list-style-type: none"> • Reflect on the positioning of learners within the classroom to maximise their engagement. Some learners will benefit from working and interacting with selected others. A calm environment will help minimise distractions. • Consider adapting the lesson to break it into chunks that permit time for paired or group talk and allow tasks to be completed across manageable stages. • Pre-expose learners to the content of the lesson by sharing with them any resources to be used as well as the content of the lesson, perhaps showing an example of the kind of outcomes they will produce. • Giving time for learners to look back through their DT folder to make connections to what they already know, which in turn can help nurture motivation. • Allow movement breaks if and when necessary and give learners classroom jobs such as handing out a resource. This will support learners who struggle with self-regulation. • All learners should routinely clean and tidy away the equipment they have used and time for this needs to be built into lessons, as it is a useful tool for encouraging independence as well as managing transitions.
<p>Supporting learners who need additional time to develop conceptual understanding</p>	<ul style="list-style-type: none"> • Provide opportunities for small group learning either before (pre-teach) or during the lesson. This will support learners and allow time to ask questions or explore resources alongside adult intervention. • Take time to model and demonstrate each element of a process, allowing learners to develop their understanding through a step by-step approach. This will benefit all learners as it allows for an active participatory approach. • Showing outcomes from the previous lesson's work can be a useful memory aid.

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| | <ul style="list-style-type: none">• Have visual aids in the form of worked examples that the learners can have to hand when completing independent tasks |
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