



Inclusive strategies to support pupils with SEND in Computing








Bebrave 

Bebrilliant 

Believe 

Cognition and learning

<p>Memory</p> 	<ul style="list-style-type: none"> ★ Use of a voice recording device such as talking tins ★ Offer additional thinking time to formulate responses and act upon instructions. To support this, warning of the question/response is useful ★ Offer short, personalised instructions in the correct task sequence ★ Provide visuals to support vocabulary ★ Tasks to be broken down into smaller, manageable steps – use of task management boards ★ Offer pre-teaching sessions to make the unfamiliar feel familiar
<p>Task Organisation</p> 	<ul style="list-style-type: none"> ★ Offer a visual task timeline/ task management board ★ Offer a Workstation approach ★ Ensure equipment is well organised and easily accessible ★ Use of visual time prompt such as timers ★ Tasks to be broken down into smaller, manageable steps – use of task management boards ★ Ensure computing resources are accessible
<p>Concentration</p> 	<ul style="list-style-type: none"> ★ Be explicit about the rules of when to use the equipment and when to listen and focus on verbal instructions. ★ Offer a visual task timeline/ task management board ★ Offer frequent and planned refresh/refocus breaks built into a visual timeline ★ Use of a tabletop timer to show how long the child must work for ★ Ask the child to explain in their own words what they are learning/their task ★ Break larger tasks into small steps and offer a motivator for successful completion of each one ★ Keep focused activities short and intersperse with child-led activity
<p>Information Processing</p> 	<ul style="list-style-type: none"> ★ Allow additional thinking time to process and react to instructions/information ★ Explore the learning style of the pupil and ensure you reflect their processing style in your teaching style and resources ★ Ensure you offer a range of teaching styles within your QFT. ★ Verbal information to be supported with use of visuals ★ Provide screenshots of learning / print outs of symbols to be used during the learning.
<p>Recognition and Recording</p> 	<ul style="list-style-type: none"> ★ Assess whether the pupil has a gap in their learning experiences and understanding. If this is the case, ensure strategies that are implemented are interactive, multisensory and reflect early learning experiences e.g. flashcards with picture/rhyme hooks ★ Alternative methods of recording such as typing, dictation (see below), videoing etc. ★ Children can dictate work using immersive reader ★ Lowercase keyboard stickers to support children with finding correct letters

Application



- ★ Offer opportunities to physically complete tasks; e.g. coding a friend before a bee-bot, before a computer.
- ★ Let children access, explore and handle devices regularly.
- ★ Provide opportunities to play and experiment with devices and applications.
- ★ Question child around real-life events and experiences use photographs to support this.
- ★ Incorporate role play and drama/dress up to perform a command.
- ★ Practitioner to model thinking whilst completing tasks – ‘Think out loud’ while solving problems, debugging etc.
- ★ Offer procedure activities to check understanding.
- ★ Ensure that the illustrations in the powerpoint directly support learning intention.
- ★ Provide visuals (‘unplugged’) for the pupil. This will build familiarity with the code before using a device.
- ★ Pre-teach vocabulary and model within context. Pre teach vocabulary - over learn vocabulary linked to topic/task.

Communication and Interaction

Social interaction Communication



- ★ Introduce specific my turn/your turn activities so that the pupil can work collaboratively with another to complete a task
- ★ Always give a clear role/purpose in group work. Provide a brief check-list of what that role looks like/involves
- ★ Model ‘wondering aloud’: ‘I can see that Daniel has tears in his eyes. I wonder if this is because he is sad. I will go and see if I can help him.’
- ★ Give the pupil a clear role such as device user / team leader and signpost the steps to their success
- ★ Surround with positive peer role models and explicitly narrate their behaviours.

Verbal/non-verbal Communication




- ★ Use partner talk strategies if the child has a peer or adult that they can talk to.
- ★ Visuals to support instructions and understanding
- ★ Use of Makaton signing if appropriate
- ★ Being aware of children’s non-verbal communication such as gesture and body language
- ★ Objects of reference to aid understanding and routine

Receptive and Expressive language



- ★ Introduce pre- teaching of targeted subject specific
- ★ Provide opportunities for overlearning vocabulary
- ★ Make vocabulary mats available as a table top resource with supporting visuals
- ★ Support the pupil to create a personalised vocabulary bank/dictionary containing visual supports.
- ★ My turn/ your turn approach to learning new vocabulary and definitions

Attention



- Sit the child near the front and make frequent eye contact. Consider who they are sitting next to (positive peer role model)
- Reduce language. Keep instructions as short as possible. Break them into small steps and give one at a time.
- Give a synopsis of what is to come, 'After you select these options you should then...'
- Reduce visual and noise distractions
- Gain attention through saying child's name before giving instructions

Listening



- ★ Read aloud function on Purple Mash (help videos)
- ★ Allow child extra time to process the language they are being told.
- ★ Give the child a question to ask prior to the lesson or give them an answer to a question that will be asked during the lesson. This can promote active listening. When first introduced make sure you ask the question early in the lesson, slowly, this time can be extended.
- ★ Think about seating plan to minimise distraction

Social, Emotional and Mental Health

Regulation



- ★ Feelings charts
- ★ Staff trained in emotions coaching
- ★ Safe spaces for withdrawal
- ★ 5-point scale charts used
- ★ Emotions cards
- ★ Sensory diet and use of sensory manipulatives

Self Esteem





- ★ Encourage other pupils to compliment the target pupil. This can be introduced whole class via peer marking approach.
- ★ Openly acknowledge and model that it is okay to make mistakes. During adult led activities role play making a mistake and talk through how to recover.
- ★ Scaffolded learning where pupils can succeed
- ★ Having clear success criteria so pupils can recognise success
- ★ Task management boards
- ★ Visual timetables

Anxiety





- ★ 1:1 or small group reading/talk partners to help build confidence
- ★ Task management boards
- ★ Visual timetables
- ★ Use of timers
- ★ Worry monsters/jars/wellbeing-emotions plaques
- ★ 5-point scale charts used
- ★ Mindfulness activities


<p>Resilience</p> 	<ul style="list-style-type: none"> ★ Re-read familiar texts ★ Growth mindset approach ★ Structured and repetitive sequences of lessons ★ Visual timers ★ Visual timetables ★ Task management boards ★ Modelling making mistakes
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<p>Self-confidence</p> 	<ul style="list-style-type: none"> ★ 1:1 or small group reading to help build confidence ★ Re-read familiar texts ★ Growth mindset approach ★ Structured and repetitive sequences of lessons ★ Visual timers ★ Visual timetables ★ Task management boards ★ Modelling making mistakes
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Physical and/or Sensory needs

<p>Fine Motor Skills</p> 	<ul style="list-style-type: none"> ★ Use of different devices: iPad, laptop, talking tins, immersive reader, See Saw etc. ★ Provide a mouse if needed ★ Zoom in / out of screen
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<p>Gross Motor Skills</p> 	<ul style="list-style-type: none"> ★ Include large gross motor gestures/actions as a support for remembering key content information or subject specific vocabulary. ★ Use of alternative methods of recording: iPad, laptop, talking tins, immersive reader, See Saw etc. ★ Provide a mouse if needed ★ Zoom in / out of screen ★ Adaptive seating e.g. wobble cushion, physio chair,
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<p>Hearing impairment</p> 	<ul style="list-style-type: none"> ★ Provide a note taker (adult or peer) to record key information ★ Include opportunities for repetition in lesson time. ★ Appropriately placed seating within the classroom ★ Use of hearing loops / headphones etc – if appropriate ★ Reduced background noises within the class e.g. fans, radiators etc ★ Pre teach of vocabulary ★ High level of visual support for the spoken word ★ Use of subtitles if watching video stimulus
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Visual Impairment



- ★ Zoom in / out of screen
- ★ Allow work to be completed using different methods such as iPad, laptop, talking tins, immersive reader, See Saw etc. and provide feedback in a similar way.
- ★ Screen filters to cut down glare

Sensory processing



- ★ Ensure tasks are presented clearly and uncluttered
- ★ Use of sensory stories
- ★ Recognise support needed for different sensory aspects e.g. a child with an auditory sensory need may benefit from sitting near the door so that they can withdraw from the room if the noise level gets too high.
- ★ Individualised sensory timetables with regular sensory breaks to reduce sensory arousal