

Computing - Potential barriers and possible strategies to overcome these for learners with SEND

	Cognition & Learning	Communication & Interaction	Social, emotional & mental health	Physical, sensory & medical
Potential barriers to learning in Computing	<p>Difficulties reading and accessing the text</p> <p>Struggling with new and abstract concepts</p> <p>Being unsure of the rules of the computer room/suite.</p> <p>During online safety lessons, not understanding the rules and consequences of being/ not being safe.</p>	<p>Finding technical and subject specific language difficult</p> <p>Applying new (and misunderstood vocabulary to work) can create misconceptions in the fundamental aspects of the computing curriculum.</p> <p>During online safety lessons, not understanding the unsafe language used online or being able to report it to an adult in the correct way</p> <p>Finding difficulty with working alongside their peers/ in groups.</p>	<p>Becoming anxious due to being outside of the classroom (unfamiliar surroundings)</p> <p>Misinterpreting the social and emotion cues of safe/unsafe online safety</p> <p>Finding difficulty with working alongside their peers/ in groups.</p>	<p>Finding a barrier in accessing their work when viewing the computer screens.</p> <p>Not being able to access videos due to hearing issues.</p> <p>New language is misheard.</p> <p>Being in a different classroom setting when needing routine.</p>
Examples	<p>The pupil is unable to read the text from the interactive whiteboard or from their own computer screen.</p> <p>Words such as 'algorithm' and 'debug' are key concepts in the computing curriculum. But are words that will not have been used in the pupils 'everyday' vocab.</p>	<p>Words such as 'algorithm' and 'debug' are key concepts in the computing curriculum. But are words that will not have been used in the pupils 'everyday' vocab.</p> <p>Not being able to access group work and pair work due to their communicative barriers.</p>	<p>Feeling unsafe or dysregulated as the pupil is out of their safe and familiar space of the classroom.</p> <p>Not being able to access group work and pair work due to social and emotional barriers.</p>	<p>Pupils not being able to see things correctly or have difficulty accessing certain programs.</p> <p>Pupils being unable to access resources as they find them hard to hear or are unable to hear them at all.</p> <p>Due to language being new to them, they may mishear definitions, pronunciations or how</p>

Computing - Potential barriers and possible strategies to overcome these for learners with SEND

	<p>Not understanding how to behave in a new environment/ classroom whilst being around the computers.</p>			<p>to apply these words correctly in their work.</p>
<p>Suggested strategies and support</p>	<ul style="list-style-type: none"> • Instead of saying "Don't share personal information online", consider a more realistic statement i.e. "Always ask a trusted adult, before sharing personal information online." • Provide small steps to complete in independent learning activities as computing task could be unfamiliar. • Provide handouts of resources needed for the lesson so they can reference it throughout. 	<ul style="list-style-type: none"> • <u>Consider using SMART rules created by Childnet that include the use of widget symbols.</u> • Adapt instructions to unpick technical vocabulary so that the children can understand them. • Provide opportunities for pairs to talk about unfamiliar topics/ words. • Print out symbols and programmes that will be used in that lesson. 	<ul style="list-style-type: none"> • Ensure that parent/s/carers have implemented sufficient blocking or filtering software on pupil's devices; consider referring them to Online Safety lead for guidance on this. • Make sure that a SEND pupil's trusted adult/s or 1-2-1 support worker/s is/are utilised so that they can scaffold exploration of online spaces safely. • <i>Could they 'rehearse' alone before working with a peer/have a consistent peer partner?</i> 	<ul style="list-style-type: none"> • Ensure that children are able to adjust screen resolutions on computers and how to zoom in to make it easy to read. • Consider the colours of text and backgrounds used on the board and on handouts. • Allow breaks from the screens due to risk of fatigue. • Ensure that any videos are subtitled so that children with hearing impairment can access them. • Children were given seats that they sit in every time. This familiarity helps them become settled and used to their surroundings.