

Cognition & Learning - Executive Function- Working Memory

What will you see? (Barriers)	What can help?
<p>Working Memory: <i>Working Memory is crucial for developing fluent literacy and numeracy skills, organisation and following instructions</i></p>	(Strategies and provision)

CYP may have difficulty:

<ul style="list-style-type: none"> • Remaining focused on the task and/or appear not listen effectively 	<ul style="list-style-type: none"> • Guide to Executive function: executivefunction101ebook_344.pdf (edrevsf.org)
<ul style="list-style-type: none"> • Being motivated to learn 	<ul style="list-style-type: none"> • Recap information from the previous lesson, reminders of the 'big picture' of learning
<ul style="list-style-type: none"> • Keeping up with the pace of whole class teaching and learning 	<ul style="list-style-type: none"> • Provide a visual model/example so the pupil knows what is required
<ul style="list-style-type: none"> • Remembering instructions 	<ul style="list-style-type: none"> • Be prepared to repeat instructions or modify how the learning activity is presented (repeat with a smile)
<ul style="list-style-type: none"> • Managing multi-step tasks and problem solving 	<ul style="list-style-type: none"> • Remove distractions
<ul style="list-style-type: none"> • Copying from a worksheet or the board 	<ul style="list-style-type: none"> • Gain CYP attention before giving instructions
<ul style="list-style-type: none"> • Understanding and/or retaining verbal information (auditory processing) 	<ul style="list-style-type: none"> • Teach listening skills
<ul style="list-style-type: none"> • Understanding and/or retaining written information 	<ul style="list-style-type: none"> • Avoid split attention
<ul style="list-style-type: none"> • Organising tasks such as time keeping, homework, equipment 	<ul style="list-style-type: none"> • Reduce cognitive load
<ul style="list-style-type: none"> • Making academic progress 	<ul style="list-style-type: none"> • Keep it short and simple (KISS)
<ul style="list-style-type: none"> • Keeping their place in tasks 	<ul style="list-style-type: none"> • Teach key vocabulary and overlearn
<ul style="list-style-type: none"> • They may appear to daydream 	<ul style="list-style-type: none"> • Give processing time (wait time)
<ul style="list-style-type: none"> • Peer social interactions 	<ul style="list-style-type: none"> • Ask pupil to repeat instruction
	<ul style="list-style-type: none"> • Dual coding (visual and aural presented together)
	<ul style="list-style-type: none"> • Clear uncluttered presentation with no unnecessary images
	<ul style="list-style-type: none"> • Clear visual environment
	<ul style="list-style-type: none"> • Colour coding and highlight of key information
	<ul style="list-style-type: none"> • Where possible include movement and rhythm, as a moving image is often remembered more easily
	<ul style="list-style-type: none"> • Use CYP' strengths, such as drawing, to map out thoughts using diagrams or flow charts
	<ul style="list-style-type: none"> • The use of visuals e.g. task steps, visual timetable, now and next boards
	<ul style="list-style-type: none"> • Use scaffolding but look for opportunities to remove it over time

	<ul style="list-style-type: none"> • Teach the CYP strategies to minimise cognitive load such as note taking, highlighting, skimming and scanning, mind mapping, visualisation, colour coding, memory aids, Apps, memory games
	<ul style="list-style-type: none"> • Use of small memory aids such as on a keyring with key words, facts, calculation techniques, sentence starters
	Resources
	<ul style="list-style-type: none"> • Relevant visual prompts
	<ul style="list-style-type: none"> • Provide print outs of key information to avoid the need to copy from the whiteboard
	<ul style="list-style-type: none"> • Use digital aids such as recording devices and i-Pads to help retain the essential information
	<ul style="list-style-type: none"> • Text to speech software - such as apps
	<ul style="list-style-type: none"> • Understanding how working memory problems impair classroom learning

Speed of Processing

Processing speed is the pace at which you take in information, make sense of it and begin to respond. This information can be visual, such as letters and numbers. It can also be auditory, such as spoken language.

• CYP may:

<ul style="list-style-type: none"> • Take significantly longer than peers to start and complete tasks 	<ul style="list-style-type: none"> • A calm quiet environment when giving instruction
<ul style="list-style-type: none"> • Appear to forget information or instructions 	<ul style="list-style-type: none"> • Give time to process any information that is given either orally or in written form
<ul style="list-style-type: none"> • Seem easily distracted 	<ul style="list-style-type: none"> • Give time to think and recall the word needed to answer question (take up time)
<ul style="list-style-type: none"> • Give up easily and appear frustrated with learning 	<ul style="list-style-type: none"> • Give time to recall / formulate sentence / thoughts
<ul style="list-style-type: none"> • Lack confidence in their learning 	<ul style="list-style-type: none"> • Give time to be able to recall the appropriate sounds when spelling
	<ul style="list-style-type: none"> • Give time to be able to retrieve the correct sound and blend them together when reading
	<ul style="list-style-type: none"> • Give extra time to complete tasks. It is also important to be aware that the CYP may find tasks
	<ul style="list-style-type: none"> • more tiring than other pupils
	<ul style="list-style-type: none"> • Chunk information
	<ul style="list-style-type: none"> • Accompany talk with demonstration where possible
	<ul style="list-style-type: none"> • Visual processing - provide 'windows' to section off written material