

Understanding and Supporting Students Dyslexia with Working Memory Deficits

Classroom Presentation

Academic Task Engagement

When the student understands:

- Engaged and participatory
- Stronger verbal than written responses
- Demonstrates understanding in discussion

When the student does not understand:

- May appear disengaged or oppositional
- Avoids starting tasks
- Copies peers rather than generating work
- Waits for direction instead of initiating
- Starts but does not sustain work
- Leaves sections incomplete
- Provides minimal or surface responses

Reading-Based Instruction

Dyslexia affects decoding accuracy, fluency, and reading stamina, increasing working memory load.

- Loses place while reading
- Skips or re-reads text without meaning
- Slow reading pace
- Guesses unfamiliar words
- Misinterprets key vocabulary
- Shuts down during silent reading
- Avoids reading aloud

Response to Teacher Instructions

Working memory difficulties impact retention of multi-step directions.

- Appears not to listen (retention difficulty)
- Completes only first step
- Forgets subsequent steps
- Requires repetition
- Watches peers before starting
- Delayed task initiation
- Copies rather than understands
- Frequent clarification questions
- Avoid help-seeking - embarrassment

Written Output

Writing places high demand on spelling, organisation, and working memory.

- Brief responses with limited detail
- Off-topic or misinterpreted answers
- Incomplete sentences
- Poor organisation of ideas

Processing Speed & Cognitive Load

- Slow task initiation
- Slow copying
- Delayed completion
- Mental fatigue
- Head down / break seeking
- Frustration with timed tasks

Emotional & Help-Seeking Responses

- Shutdown or withdrawal
- Avoids eye contact
- Frustration or irritability
- Negative self-talk
- Fear of trying
- Task refusal
- Reluctant to ask for help
- Asks peers instead
- Waits for teacher support
- Copies others' work
- Uses humour or distraction to mask difficulty

Peer Comparison & Social Impact

Often aware of performance differences.

- Avoidance of public participation
- Copying peers to mask difficulty
- Aligning with disruptive peers
- Social withdrawal in academic tasks

Micro-Indicators

- Looks around before starting
- Checks peers' work repeatedly
- Over-highlights text
- Writes very slowly
- Memorises peer responses
- Says "I forgot" when learning did not occur

Functional Understanding

- Decoding effort increases
- Working memory becomes overloaded
- Meaning is not retained
- Task demands exceed capacity
- Protective behaviours emerge
- Behaviour is typically driven by cognitive overload, not defiance.

Teacher Adjustment Guide

Instruction Delivery

- Provide short, chunked instructions
- Present one step at a time
- Repeat and rephrase directions
- Check for understanding privately
- Provide written + verbal instructions

Reading Supports

- Pre-teach key vocabulary
- Provide audio or text-to-speech options
- Reduce reading volume where possible
- Allow shared or guided reading
- Avoid unexpected reading aloud

Writing Supports

- Allow verbal responses where appropriate
- Use scaffolds, sentence starters, writing frames
- Reduce written load without reducing content
- Allow typing instead of handwriting
- Provide spelling supports

Working Memory Supports

- Use visual task lists
- Display step-by-step instructions
- Provide checklists
- Allow repetition without penalty
- Use memory aids (anchor charts, cue cards)

Task & Assessment Adjustments

- Provide extra processing time
- Reduce time pressure
- Break tasks into smaller components
- Allow alternative demonstration of learning
- Monitor fatigue

Emotional & Engagement Supports

- Normalise help-seeking
- Offer private support
- Reinforce effort over output
- Avoid public comparison
- Provide encouragement before task initiation