2-HOUR SUPER WORKSHOP

Unlocking Focus

Supporting Working Memory and Automaticity in Students with Dyslexia and ADHD

60 min teaching · 60 min practicum

GROWTH READING CENTER

By the end of this hour you will understand:

01

Working Memory

Why it is the hidden bottleneck for many learners

02

Automaticity

How it frees (or overloads) working memory

03

Dyslexia + ADHD

Why these factors hit these students especially hard

04

Three Principles

The framework that makes any strategy actually work

Familiar moments

“What are we supposed to do?”

Student asks this right after you finish explaining a three-step direction.

Reads every word… then can’t say what it meant.

Accuracy without comprehension — classic sign of overloaded working memory.

The brain’s temporary workspace

Working memory holds and manipulates information just long enough to use it — the beginning of a sentence while decoding the end, a multi-step direction, or the question while forming an answer.



Think of it as a mental whiteboard

Limited space. Ink that fades quickly.
Most adults hold 4–7 chunks. Many students with dyslexia or ADHD hold fewer — and the ink disappears faster.

ADHD

Common working-memory challenges

- Difficulty filtering irrelevant information
- Trouble updating or shifting content
- Harder to sustain attention to the whiteboard
- Directions heard… then partially vanish

Dyslexia

Phonological loop under extra strain

- Decoding is effortful — uses huge capacity
- Little left for comprehension or monitoring
- Holding the question while answering is hard
- Reading + writing compounds the load

What it looks like in the classroom

- Asks “What are we supposed to do?” right after directions
- Loses place constantly while reading
- Can answer orally but falls apart when writing
- Understands in the moment, then can’t complete independent work
- Melts down when tasks require holding multiple pieces of information



Key insight: Verbal processing is often a compensatory strategy

Thinking out loud, whispering steps, or quiet self-talk helps keep information alive on the mental whiteboard. Insisting on complete silence can remove one of the few tools these students have.

When a skill becomes automatic, it stops eating working-memory space.

Classic example: Driving

When you first learned, every action required intense focus. Now you can drive, talk, and navigate at the same time — because the basic skills are automatic.

In reading, automaticity includes:

Letter-sound knowledge

Instant, effortless

High-frequency words

Recognized at a glance

Blending & decoding

Smooth and largely unconscious

The cruel cycle for many students

1. Weak automaticity
2. Higher working-memory demand
3. More errors & slower reading
4. Frustration & less successful practice
5. Even weaker automaticity

When attention difficulties amplify everything

Dyslexia and ADHD co-occur at high rates (often 30–50% in clinical samples). Even with one diagnosis, profiles frequently overlap.

Reading Fluency

Accuracy + rate + prosody suffer first

Note-taking

Nearly impossible under load

Multi-step work

Math problems and projects fall apart

Written output

Slow, incomplete, exhausting

Test-taking

Time pressure becomes punishing

Self-regulation

Cognitive load spills into behavior

Three interlocking principles guide every effective strategy

01

Reduce Cognitive Overload

Externalize information, chunk tasks, minimize simultaneous demands, allow productive self-talk.

02

Build Executive-Function Supports

Scaffold planning, monitoring, shifting, and sustaining attention — then gradually release.

03

Strengthen Fluency Through Practice

Short, frequent, structured, multisensory practice that builds automaticity on purpose.

Reduce Cognitive Overload

Shrink the demand on working memory

Externalize	Visual schedules, written directions, anchor charts the student can look at instead of holding in mind
Chunk	Break tasks into smaller pieces; only reveal the next chunk when the student is ready
Reduce simultaneity	Don’t ask students to decode hard text + take notes + answer higher-order questions all at once
Allow self-talk	Controlled verbal processing or quiet self-talk — for some learners, their own quiet voice is a powerful memory aid

Build Executive-Function Supports

Scaffold the control system that manages working memory

Preview the game plan

Before the task, make the sequence visible and explicit

Checklists & self-monitoring

Give students a concrete way to track their own progress

Structured check-in points

Build in moments to pause, assess, and adjust

Metacognitive scripts

Teach simple phrases: “Does this make sense?” “Where did I lose my place?”

Strengthen Fluency Through Deliberate Multisensory Practice

Not all practice is equal. Effective fluency practice is:

Short & frequent	Better than long and occasional
Structured & cumulative	Builds systematically on prior success
Multisensory	Seeing, saying, hearing, writing/touching
Accuracy first	Then rate — never sacrifice correctness
Success-oriented	Students experience progress and competence

The big idea

We cannot simply demand more focus from students whose working memory and automaticity systems are overloaded.

We have to redesign the load and deliberately build the automaticity.

Next hour — hands-on

Role-plays · Chunking routines & memory aids · Fluency activities · Low-prep accommodations