

**Working Memory: Classroom Strategies to Support Students with ADHD in High School**

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CanLearn Society

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**Take Ten Spotlight Series**

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**Take Ten Spotlight Series**

**Videos and Tip Sheets (English and French)**

Reframing ADHD  
Listener Friendly Instruction  
Self Advocacy  
Self Regulation  
Working Memory

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ADHD

74%  
Have

Working  
Memory  
Deficits

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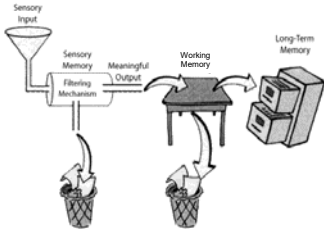
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### Information Processing

Memory



The diagram illustrates the flow of information through memory systems. It starts with 'Sensory Input' (represented by a funnel) entering 'Sensory Memory' (represented by a trash can). A 'Filtering Mechanism' (represented by a trash can) filters information, leading to 'Meaningful Output' (represented by a table). This information then moves to 'Working Memory' (represented by a desk) and finally to 'Long-Term Memory' (represented by a filing cabinet).

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### Working Memory

The ability to hold information in one's head while working with it.

This includes:

- Auditory information
- Visual information
- Executive information

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 **What is working memory?**

Think of RAM (Random Access Memory) on a computer



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 **Working memory impacts:**

- Reading
- Written Language
- Math
- Following directions
- Note taking
- Reasoning and problem-solving
- Complex learning
- Social Interactions



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 **General Strategies**

- Teach mind-mapping and brainstorming (think around the topic – cues memory)
- Encourage self-talk or verbal mediation when completing tasks
- Encourage using cues to focus on key information
- Encourage summarizing key points

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### What can you do?

- Modify the physical environment
- Reduce working memory load
- Modify evaluation
- Provide accommodations

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### Modify the Physical Environment

- **Reduce environmental distractions**
  - Noise, movement, etc.
- **Preferential seating**
  - Student needs to find the best place to reduce distractions, allow for movement

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### Reduce Working Memory Load

- Develop routines and structure
- Simplify and structure information
- Provide explicit review
- Repeat information
- Use visuals for reference (written)
- Study sessions: short, focused, frequent

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### Reduce Working Memory Load

- Allow time to retrieve responses
- Avoid open-ended questions when asking for quick responses
- Allow time for review and rehearsal (over-learning)

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### Take Ten: Working Memory

<https://www.canlearnsociety.ca/resources/take-ten-series/working-memory/>

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### Reduce Working Memory Load

- Provide explicit review
- Make overt links between new and prior knowledge
- Teach key words
- Break down instruction – smaller chunks, step by step strategies
- Provide multisensory instruction

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### Modify Evaluation

- Avoid timed conditions and tests
- Allow extra time
- Alternatively, allow them to answer fewer questions

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### Accommodations

- Encourage use of external memory aids:
  - Visual cues
  - Checklists (on door, fridge, desk, binder)
  - Paper and pencil
  - Dictionary

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### PENS

**P**review ideas.  
Think about what you want to say.

**E**xplore words.  
Identify the key words you will need in the sentence.

**N**ote words in complete sentence.  
Write out the sentence.  
Be sure to capitalize the first word and punctuate the sentence.

**S**ee if the sentence is okay.  
Make sure it makes sense  
Select verb or verbs.  
Ask yourself who or what is doing verb/verbs.  
Check to see if sentence fits a formula.

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**COPS**

- C**apitalization
- O**verall appearance (e.g., legibility, neatness)
- P**unctuation
- S**pelling

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**Use Assistive Technology**

- Encourage use of assistive technology
  - Calculator
  - Word processor
  - Spell-check device
  - Grammar-check device
  - Voice dictation
  - Text reader

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[www.canlearnsociety.ca](http://www.canlearnsociety.ca)  
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