

15th Annual
Hawker Brownlow
**Thinking &
Learning**
Conference

www.hbconf.com.au

DONNA WILSON

SATURDAY 19 MAY

Session 1

Strategies for Engaging the Brain's Attention

MELBOURNE

DR DONNA WILSON

Donna Wilson, PhD, is an educational and school psychologist whose work in cognitive education focuses on areas including cognition in the classroom, metacognition, attention, memory, motivation, and improving teaching and learning. She is an adjunct professor and lead developer of graduate programs with majors in brain-based teaching with Nova Southeastern University and head of academic affairs for the Center for Innovative Education and Prevention.



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Strategies for Engaging the Brain's Attention

Students today seem to have shorter attention spans for schoolwork than ever before. In this session, we will discover how the brain becomes engaged and ready to learn, as well as the role of the hippocampus in concentration and working memory. With the brain front of mind, we will discuss the importance of presentation and facilitation cycles and key strategies that can help students maintain a focus on learning.

Additionally, the presenter will share strategies, such as H.E.A.R., that she has co-developed for working with students who have been diagnosed as having ADHD.

Objectives and Outcomes:

- **Understanding attention in the brain**
- **Seven classroom teaching strategies**
- **Engaging students with ADHD**

Engaged Learners



If you are intensely focused on the learning task, trying as hard as you can to get better, the neurotransmitter release rises dramatically and you are ready to learn and save it.

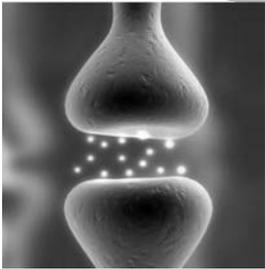
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Which scan shows the brain working harder?



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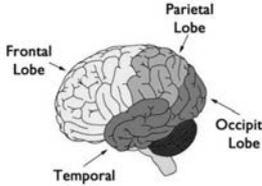
Strategy 1: Set up key conditions to help students engage and sustain attention to learn.



- * Novelty
- * Challenge
- * Practice
- * Feedback

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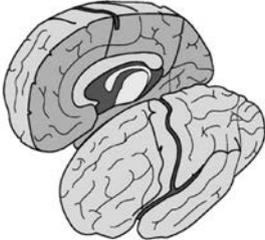
Strategy 2 : Facilitate use of the brain's multiple sensory pathways for learning.



- Frontal: Thinking & motor
- Parietal: Touch & integration of stimuli
- Occipital: Vision
- Temporal: Hearing & memory

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The Brain, Novelty, and Familiarity



Right Hemispheric (Novel Situations)

- Big Picture, Visual, Need Physical

Left Hemispheric (Repeating the Familiar)

- Linear, Verbal, and Details Important

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Do you think schools are designed more for the right hemisphere or left? Novel or repeating the familiar?



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Strategy 3:
Use the 'Focus with Downtime' cycle to help students maintain attention.



* The hippocampus has limited capacity for attention, concentration and working memory.

<http://donnawilsonphd.blogspot.com/2015/12/strategies-for-getting-and-keeping.html>

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Deep in the limbic brain...

The hippocampus is known for...

- Short-term storage, and
- Small working memory capacity.

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Bonus Strategy:
Teach students to 'chunk'...

Phone **941-200-5410**

* to help use concentration and limited working memory space wisely!

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Give plenty of downtime for reflection and dialogue.



Allow processing time for internal reflection and dialoging with a partner to help consolidate learning.

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Gender differences and attention skills at school.



• Most students labeled ADHD and in most remedial classes are male.

<http://donnawilsonphd.blogspot.com/2017/08/strategies-for-students-with-scattered.html>

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Males and females alike benefit from...



- Engaging with dynamic presentation
- Using lots of visual and kinesthetic strategies
- Learning skills such as listening and finishing power
- Group learning
- Project-based learning

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**Strategy 4:
8-20 Minute Attention Span**



- Use interactives every 8 minutes.
- Change focus approximately every 20 minutes.

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Use big gestures to help hold attention.



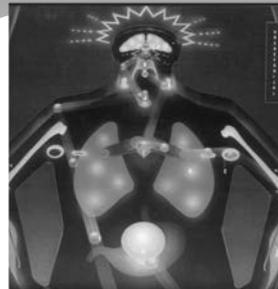
Bonus Strategy: The Ball Toss



Purpose:
Variety: To help students get re-energized and re-focused on positive learning.

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**Strategy 5:
Use Structured Movement**



- Movement throughout the school day helps with focus and attention. This strategy is especially good for students with attention challenges.
- SMART Cross
- SKY Cross
- KNEE Cross
- EAGLE Cross

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Teach students to use movement when they study at home.



- Students can learn to self-monitor their attention and use strategies for a “brain break” when needed during study time at home.

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Research: Use movement to increase optimism, cognition, and achievement.



<http://www.kappancommoncore.org/smart-moves-powering-up-the-brain-with-physical-activity>

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Teach Students How to Focus and Maintain Attention



- * Create more independent learners.

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Strategy 6: Teach Students How to Listen



- This is another great strategy for students diagnosed with ADHD or others who need to learn how to better listen actively!

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Bonus Strategy: Use repeat after me

- * Asking students to repeat what you have said or to paraphrase it in their own words is a simple way to both assess and increase their attention/working memory. The act of listening and speaking to what they have heard focuses their attention on the lesson content and activates working memory. This strategy may be particularly helpful for when students are required to listen to lengthy directions.

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Strategy 7: Teach students how to have finishing power.



- This is another great strategy for students diagnosed with ADHD and, interestingly, some gifted students.
- Complete small tasks.
 - Visualize yourself completing the task.
 - Meet some finishing power friends.
 - Celebrate completion at each step!

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Royal Roundup



Strategies for Engaging the Brain's Attention

The human brain has an amazing capacity to wield a potent cognitive strategy: attention. When we consciously focus our attention on something, we bring the power of the prefrontal cortex to this endeavor.

By honing our ability to focus attention at will, we can more effectively screen out two types of distractions:

1. Input through our sensory organs, and
2. Our emotional responses.

Distractions via sensory input may be the easier of the two to block out. As educators, we may tend to notice the impact of sights, sounds, and touch points that draw students' focus away from lessons and learning activities.

But while all of the sensory stimulations in the environment are readily obvious, emotions can be even "louder" when it comes to diverting attention in unwanted directions and making it hard to focus on learning.

In our workshop, Dr. Wilson will share two different types of strategies to support effective teaching practice that helps students to focus their attention on the lesson.

Strategies 1-5 below utilize teaching tools to support attentive learning. Strategies 6 and 7 help students to learn how to independently wield their listening skills and finishing power, both important aspects of attention.

BrainSMART® Original Strategies

from Dr. Donna Wilson's Workshop

Strategies for Engaging the Brain's Attention

- ◆ **Strategy 1: Set up key conditions to help students engage and sustain attention to learn.**
- ◆ **Strategy 2: Facilitate use of the brain's multiple sensory pathways for learning.**
- ◆ **Strategy 3: Use the "Focus with Downtime" cycle to help students maintain attention.**
- ◆ **Strategy 4: Keep front of mind the eight- to 20-minute attention span.**
- ◆ **Strategy 5: Use structured movement.**
- ◆ **Strategy 6: Teach students how to listen.**
- ◆ **Strategy 7: Teach students how to have finishing power.**

Sample BrainSMART® strategies from Dr. Wilson's Workshop

Con't next page



STRATEGY The Power of 20 Minutes

Purpose: To maximize attention, retention, and recall by aligning instruction with the brain's natural attention cycles.

Step 1: Break the learning time you have with students down to chunks of a maximum of 20 minutes. Seven- to 15-minute chunks are often optimum for younger students.

Step 2: Always begin your lesson with the most important information. The brain is most likely to remember the beginning and end of any lesson.

Step 3: At the beginning of your lesson, also give an overview of what is to be covered and create maximum curiosity.

Step 4: Add as much variety as you can in terms of where you stand in the room, how you use your voice tone, and your use of music and graphics to sustain attention and interest.

Step 5: Look for opportunities within a lesson to shift gears every eight minutes or so by switching to a different learning modality (for example, take a break from presenting and ask students to create a graphic organizer of the content), summarizing before moving on to the next level, or giving students a mini "brain break" to pause and process what they've learned so far.

Step 6: At the end of 20 minutes, ensure continued focus and active working memory. Consider using movement, doing a partner share, a mini-break or other transition activity.

The Power of 20 Minutes strategy is in Dr. Wilson's book, *Introduction to BrainSMART® Teaching* (page 289).

Sample BrainSMART® strategies from Dr. Wilson's Workshop



STRATEGY

Teach Students How to Listen

During the school year, students are expected to listen to and absorb vast amounts of content. But how much time has been devoted to equipping students with ways to disconnect from their own internal dialogue (self-talk) and to focus their attention fully on academic content that is being presented? Listening is hard work even for adults. When students are unable to listen effectively, classroom management issues arise. Teachers we've worked with find that classroom management issues decrease over time as students begin to master skills such as listening that help them become more self-directed learners.

Halt
Engage
Anticipate
Replay

STRATEGY:

H.E.A.R.

Purpose: To increase students' ability to listen and pay attention with precision.

Step 1: Discuss with students how important listening is for their relationships, for school, and for work.

Step 2: Remind students that listening is often cited as the number one skill for helping people in relationships and in business.

Step 3: Ask students why people don't listen very well and list the reasons the students give you.

Step 4: Ask students to please stand up.

Step 5: Push the flat of your hand straight in front of you and say "HALT." Explain to students that by halting their internal dialog, they free their mind to listen on the outside. Now get all students to do the "Halt" exercise.

Step 6: Say "ENGAGE" as you turn your right ear forward. Explain to students that you are now engaging full-body listening and that by turning your right ear forward the information is going directly to the part of your brain where language is best processed.

Step 7: Then stretch out both arms to the side and say "ANTICIPATE" and get students to do the same. Explain to students that the reason you want them to anticipate is to increase their capacity to listen and remember. Get them to anticipate that they will be learning something the absolutely need to know.

Step 8: Roll your hands forward in a circular fashion, like the paddle on a river boat and say "REPLAY" and ask your students to do the same. Explain that when you replay what you think that you've heard you demonstrate that you've truly listened. This will also boost your memory of what was said.

Step 9: Put the whole sequence together: Halt, Engage, Anticipate, Replay. Then get students to work in groups to discuss how important this technique could be.

Note: This technique has been effective at helping students to truly learn how to listen. The physical nature of the exercise strongly encodes the information.

A write-up of the entire H.E.A.R. strategy can be found in Dr. Wilson's book, *Introduction to BrainSMART® Teaching* (page 281).



Make Time for Movement

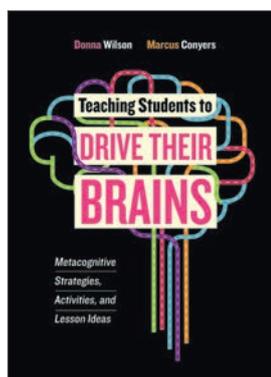
Incorporating exercise and movement throughout the school day makes students less fidgety and more focused on learning.

Improving on-task behavior and reducing classroom management challenges are among the most obvious benefits of adding physical activities to your teaching toolkit. Current research continues to explore how exercise facilitates the brain's readiness and ability to learn and retain information. In fact, John Ratey, author of *A User's Guide to the Brain*, calls exercise "Miracle-Gro for the brain" because of its role in stimulating nerve growth factors. We recommend strategies such as those Dr. Wilson teaches in the workshop to use with students and to boost teachers' body and brain health.

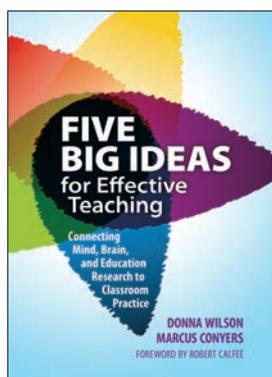
We recommend structured classroom movement strategies such as those Dr. Wilson shares in the workshop. Some teachers like to use the strategies much as we model them. Others like to adapt them for usage in a different way. Often teachers enjoy using the strategies during transitions, at the start of the day, and/or in the afternoon when energy for learning can be at a low point. Making time for movement throughout the day is especially good for students with attention challenges.

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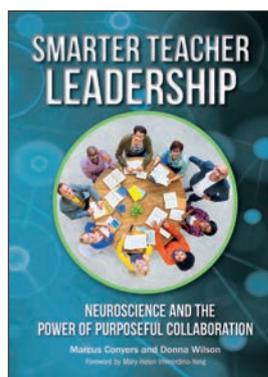
Qty	Code	Title	Price
	117002	Teaching Students to Drive Their Brains: Metacognitive Strategies, Activities, and Lesson Ideas	\$32.95
	TCP0676	Five Big Ideas for Effective Teaching: Connecting Mind, Brain and Education Research to Classroom Practice	\$32.95
	TCP4179	Smarter Teacher Leadership: Neuroscience and the Power of Purposeful Collaboration	\$35.95
	HB6623	Introduction to BrainSMART Teaching: Science, Structures and Strategies for Increasing Student Learning	\$49.95
Total (plus freight) \$			



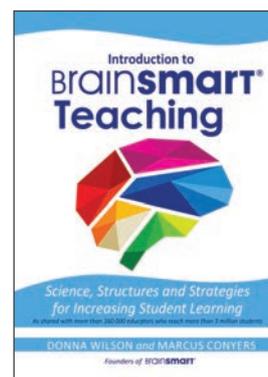
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