

# Active Learning with Fizika

Preparing Students for Optimal Learning Performance



***Increasing evidence suggests that physical activity has a positive impact on academic achievement. By implementing Active Learning strategies, educators foster greater learning potential in their students, giving them more opportunity for academic success.***

***Fizika's definition of Active Learning combines strategically placed HPE programming with classroom activities that enhance focus and improve student attention.***

***Applying research findings that demonstrate the impact of physical activity and nutrition on academic performance, Fizika provides educators with new ways to ensure their students are ready to learn.***

A complete research list available upon request.  
[michael@fizikagroup.com](mailto:michael@fizikagroup.com)

## Quick Facts: Linking Activity & Learning

- Movement is a central mission of the brain, and facilitates cognition. (Sylvester)
- Raising the heart rate oxygenates the brain and feeds it glucose (brain food) at a greater rate. (Ratey)
- Repetitive gross motor movement balances brain chemicals that calm behavior, elevate self-esteem and self-worth and accommodate ADD / ADHD. (Jensen)
- Exercise triggers BDNF, a neurochemical that plays a significant role in memory. (Squires)
- What makes us move is also what makes us think. (Hesslow)
- Movement is the body's natural reward system. (Jensen)
- Memory is retrieved better when learned through movement. (Jensen)
- Cross-lateralization (across body movement) strengthens neural connections, increases dendritic branching and anchors learning. (Dennison)
- Enthusiastic movement has been shown to improve behavior, mental focus and memory retention of ADHD students. (Wendt)
- Exercise has the same effect and benefit as anti-depressant medications. (Ratey)
- The same part of the brain that processes movement also processes learning. (Strick)

Fizika Group, LLC  
[www.fizikagroup.com](http://www.fizikagroup.com)



# Active Learning with Fizika



## Incorporate Activity into ANY Classroom

*“Physical activity is not only good for the heart, but also for the brain, feeding it glucose and oxygen, and increasing nerve connections, all of which makes it easier for children of all ages to learn. Neurons that fire together, wire together.”*

**(John Ratey, Harvard Medical School)**

*There is no single “movement center” in our brain. Movement and learning have constant interplay.*

**(Larry Abraham, University of Texas)**

*Music, rhythm, repetitive practice of patterns found in many computer and video games using balance and eye tracking are all powerful tools for physical and mental learning.*

**(Vanessa Sluming, University of Liverpool, UK)**

*Brain-compatible learning means that educators should weave math, movement, geography, social skills, role play, science and recreational music making together. “Classroom teachers should have kids move for the same reason that PE teachers have kids count.”*

**(Larry Abraham, University of Texas)**

***Children with ADHD and similar learning disabilities typically experience academic difficulties and trouble completing assigned tasks.***

The presence of ADHD is associated with behavioral problems as well as with the ability to stay focused (i.e., difficulty staying on task, responding in class).

Physical activity as an intervention in the classroom has been found to impact students with ADHD by improving their ability to focus and their overall attitude in class.

Vigorous physical activity before class has been particularly effective in dealing with students who are hyperactive, resulting in calmer more attentive students.

Employing an Active Learning strategy as a class management tool helps not only those with learning disabilities, but also improves the class learning environment for all students.

## References

Am, A. (2005). Short attention span? Exercise. *Prevention*, 57(2), 50-50. Retrieved January 20, 2009, from Academic Search Complete database.

Abramowitz, A., & O’Leary, S. (1991). Behavioral interventions for the classroom: Implications for students with ADHD. *School Psychology Review*, 20(2), 220- 237.

Armstrong, T. (1995). *The myth of the A.D.D. child: 50 ways to improve your child’s behavior and attention span without drugs, labels, or coercion.* New York: First Plume Printing.

Azrin, N., Ehle, C., & Vinas, V. (2006). Physical exercise as a reinforcer to promote calmness of an ADHD child. *Behavior Modification*, 30(5), 564-570.

**Visit our website for more information about Active Learning!**

**[www.fizikagroup.com](http://www.fizikagroup.com)**