Linking Fitness and Academic Readiness

an interview with Michael Wendt, EdD

LOCATED ALONG THE SHORES of Lake Ontario in New York, the Wilson Central School District states its commitment on its website: "We believe that exercise has a direct and material impact on learning readiness. We've set out to prove it." And the district advocates starting with children in elementary school. In its kid-friendly fitness center, state-of-the-art exercise bicycles plug into video games—but if you don't pedal, you don't play.

This commitment isn't surprising. Wilson's superintendent of schools is Michael S. Wendt, EdD. He pioneered the Kids Early Exercise Program, known as KEEP 57, which specifically targets students identified with ADHD and behavioral issues (although others may participate if referred). Wendt's program is designed to increase the child's level of physical activity on a daily basis. Improved behavior and greater ability to focus on academics are stated program goals.

While much more research is needed regarding the impact of exercise on children and adults with ADHD, the evidence so far points to the wisdom of including it in one's treatment plan. *Attention* recently

FOR MORE INFO
Email Michael Wendt at mwendt@wilson.wnyric.org to learn more or to obtain a copy of the KEEP 57 manual.

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interviewed Mike Wendt about the experiences that led him to his research and to developing the KEEP 57 program. He also shares some tips for parents and educators.

Michael Wendt, EdD

You developed the KEEP 57 Program for elementary school students with ADHD. What inspired you to start the program?

I completed research in 2000 that showed how intense exercise can improve the behavior of children with ADHD. As a result of the popularity of the research, I was flooded with requests for setting up programs similar to the one we did at the University at Buffalo. I created the KEEP 57 manual so that people could have a simple, step-by-step reference to immerse their child into structured exercise activities five out of seven (5/7) days per week.

What motivated you to do research into exercise?

I worked in public schools as a vice principal back then. I coached athletic teams—football, basketball, wrestling, and track as well. It seemed that when my students who had ADHD took part in interscholastic athletics—especially at the beginning of the season when the practices are cardio-intense—they seemed to frequent my office less often and their behavior seemed to improve. As a result, I felt there was a relationship between the two and proposed a study to research any possible connection.

Describe your research at the State University of New York at Buffalo.

We enrolled children who had been diagnosed with ADHD. Some were medicated and some were not. Over the course of six weeks, we immersed them into daily exercise at least five out of seven days per week. The sessions were approximately forty minutes in length. I had them in the exercise heart rate zone of 135 to 175 beats per minute (all subjects were monitored by a heart rate monitor) for twenty of the forty minutes. Over the course of the six weeks we kept them immersed in the activity. We completed pre- and post-Conners ratings as well as a survey. We achieved a significant change when our subject (kids in exercise) was compared with our control (kids not in exercise) by .001 percent. This means if we did the experiment a thousand times then we would likely get the same results nine hundred ninety-nine times.

Why do you think exercise improves behavior and brain development?

Conventional research now tells us that the brain is dynamic. Exercise and heart rate play a vital role in providing blood flow to the brain. The brain can grow and increase neurons, but it relies on blood flow (via the heart) and stimulation (via brain work). Exercise can also change brain chemistry. People instantly think of the endorphin effect. However, it is what we termed an increased presence of catecholamines (dopamine, epinephrine, norepinephrine). Combined with the fact that exercise can promote the growth of neurons, you now have a two-prong effect. Positive changes in both brain growth and brain chemistry can result from exercise. Common medications often burn back receptor sites in the brain to achieve a change in brain chemistry. This change in brain chemistry can have an impact on behavior. Exercise can actually promote the growth of these same receptor sites. I think the choice is obvious.

John Ratey described the Naperville, Illinois, school district's revolutionary physical education program in his book *Spark*. How would you contrast KEEP 57 with that program?

I actually presented KEEP 57 to Naperville in the early 2000's. KEEP 57 may have been a catalyst for the great people in Naperville to move forward with their initiative. We had the study on the web and related materials about the positive effects of exercise on the brain from 2000 to about 2005. After reading the site I am sure a lot of people were motivated to review the possibilities behind exercise and its impact on the brain, especially the pre-adolescent brain.

Do you recommend that all participants first obtain clearance from their physician? What about heart- rate monitoring?

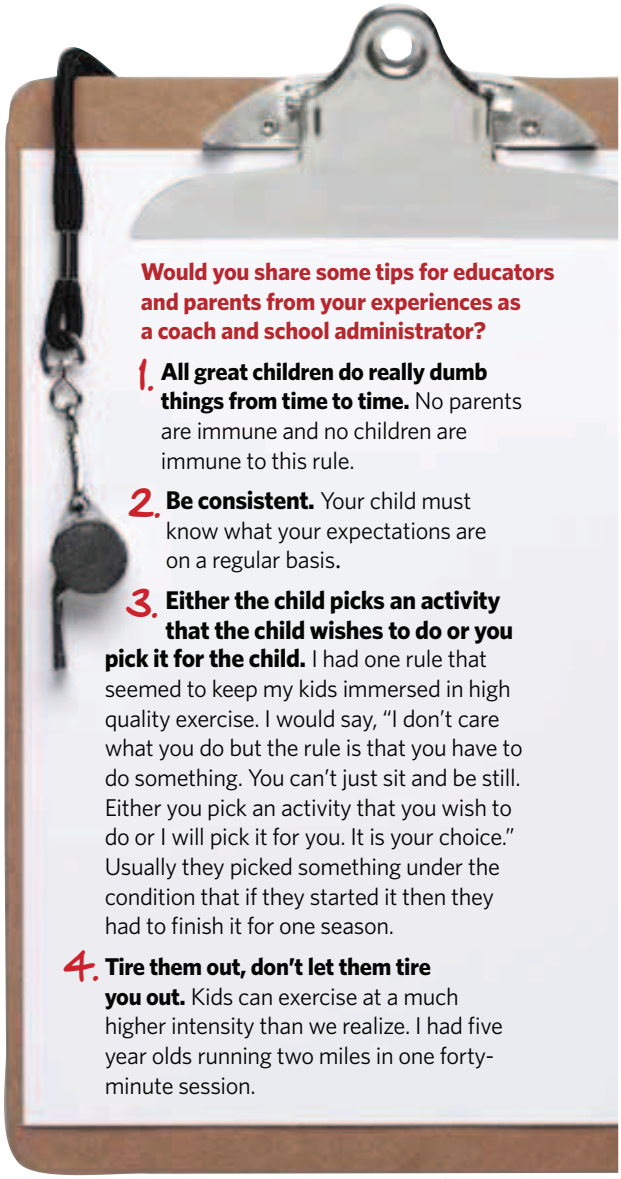
I recommend all participants consult with their physicians before starting any exercise program. Heart-rate monitoring is important, because if your child is not athletic or is overweight, then he or she will need to work harder to keep up with the children who are in shape. Always focus on the child's personal best. The heart-rate monitor allows you to do just that.

How does the KEEP 57 program motivate students to exercise daily?

I can make the manual available to anyone who requests it. There are many details in the manual. However, it is important to switch up exercises each day to keep the child's interest. The same exercise every day can be cumbersome and boring.

Do you think a sedentary lifestyle is particularly problematic for children affected by ADHD?

Yes. Remember that high-performance parents will have high-performance kids. Physical exercise provides an outlet for that high performance. Remember to celebrate the fact that your kids want to move.



Would you share some tips for educators and parents from your experiences as a coach and school administrator?

1. **All great children do really dumb things from time to time.** No parents are immune and no children are immune to this rule.
2. **Be consistent.** Your child must know what your expectations are on a regular basis.
3. **Either the child picks an activity that the child wishes to do or you pick it for the child.** I had one rule that seemed to keep my kids immersed in high quality exercise. I would say, "I don't care what you do but the rule is that you have to do something. You can't just sit and be still. Either you pick an activity that you wish to do or I will pick it for you. It is your choice." Usually they picked something under the condition that if they started it then they had to finish it for one season.
4. **Tire them out, don't let them tire you out.** Kids can exercise at a much higher intensity than we realize. I had five year olds running two miles in one forty-minute session.

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