

Naperville Central ties in gym with learning

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Gym class long has been about more than dodgeball and basketball at Naperville Central High School. But now some physical education instructors are taking things further and team-teaching with colleagues in literacy programs to help students who read below their grade levels.

Through the new Zero Hour P.E. class, gym teachers have found a way to take advantage of research that shows exercise can improve learning, says Paul Zientarski, chairman of the school's health and physical education department.

By combining the early gym classes with literacy lessons, they think they've found a new way to reach students who struggle with reading.

"It's going to be a major breakthrough in education," said Phil Lawler, director of the PE4life Academy in Naperville who has been working with Zientarski. "It's going to get to the point that physical education is the core class for all learning."

Participating students — there were 11 freshmen during first semester and five during second semester — set their alarms about 45 minutes earlier than most classmates to take part in the program. The students voluntarily took the 7 a.m. Zero Hour gym class, followed a short time later by a literacy class.

Now parents and teachers say they're seeing a difference both in test scores and attitude.

When Principal Jim Caudill started a literacy class two years ago, some parents expressed concerns that it took up an elective period. Having read research about exercise and the brain, Zientarski agreed to hold a Zero Hour gym class as long as he could use an English teacher to team-teach it.

Zientarski's confidence in the class rested in the research of John Ratey, clinical associate professor of psychiatry at Harvard Medical School. Ratey found that exercise releases chemicals he said are like Miracle-Gro on the brain.

"What I know from my research ... is that exercise really helps a brain to do all kinds of things much better," Ratey said. "It certainly improves the tension, decreases fidgetiness or impulsiveness, improves mood and probably also improves motivation."

These improvements, he said, make students more prepared to learn.

Reading specialist Maxyne Kozil also was on hand to incorporate literacy drills into typical gym activities. For instance, students practice vocabulary while rolling around the gym on scooters, or watch "To Kill a Mockingbird" while on treadmills.

"Over the last 10 years, we've become more audio-visual-oriented," said literacy teacher Debbie St. Vincent. "It makes sense we change how we learn. We're not in the 1950s where we can sit and read books peacefully."

Students also are making use of the interactive electronic equipment the school has received from PE4life, such as Sportwalls, which help with cross-lateral movement, coordination and concentration or Trazers, which

are similar to virtual reality games that can provide a cardiovascular workout and enhance agility.

Zientarski said test scores of students in the Zero Hour class are proving Ratey's research to be correct. During first semester, reading scores for students in the program improved by the equivalent of 1.4 grade levels, while literacy students who didn't take the early gym class improved by 0.9.

"These were the kids that eventually started taking leadership roles in small groups," said Neil Duncan, who teaches the Zero Hour class. "They were the ones that were speaking out, raising their hand and interacting with the class and the teacher."

Steve Gedutis said his daughter, Krissy, has had more energy, a better routine and went from being an average student in junior high school to making the honor roll first semester of her freshman year.

The students said getting up early was tough but they liked having an extra period for an elective and noticed a difference in themselves the rest of the day.

"It gives you a little more focus in your next class," said freshman Joe Devitt. "And you get gym out of the way."

Lawler said the affects of exercise last about three hours.

Now the challenge for Zientarski is getting the word out to other schools and to administrators that physical activity can impact learning. Currently, only 5 percent of high schools in the U.S. have daily gym class, according to Lawler.

"The problem is that No Child Left Behind is getting administrators to think that more seat time is better for education," Zientarski said. "And actually we now have proof that's not true. So more time in the classroom isn't the answer but preparation, getting you body ready to learn through activity, is the way to increase test scores."

Next year, Caudill said Central will configure its schedule so that all freshmen in the literacy program can take gym during first period, followed by communication and cultures classes and possibly literacy class.

Zientarski said special education teachers also are reconsidering how they schedule their students, knowing they can schedule academic classes later in the day as long as they're preceded by gym class. Other counselors also may start scheduling gym class before a student's most difficult class.

Ratey, who has visited Naperville twice, will feature Central's physical education program in two chapters of the book he is writing, tentatively titled "Exercise and the Brain," which is due out next spring.

"I would encourage schools to encourage ... not just Zero Hour," Ratey said, "but the whole attitude toward physical education that Naperville has instilled as part of their culture now."