

Illinois school sets pace as PE model

Cardiovascular wellness is a top priority at Naperville

By Tom Weir
USA TODAY

Students leave high school in Naperville, Ill., with a second kind of transcript besides the one that tracks classes and grades.

It is a fitness profile dating to the sixth grade, and it provides a personal history on blood pressure, cholesterol levels, body fat percentage and the student's cardiovascular performance.

The Naperville school district's approach to physical education has led to it being named a model program by the Centers for Disease Control and Prevention.

Naperville decided to modernize its approach to PE about 15 years ago after making the painful realization that its gym classes were failing to serve the community.

"We had a staff meeting, and someone brought in an article on the trend of obesity and kids," says Phil Lawler, the district's PE coordinator. "We said, 'Is this a reflection on us?' That day, we made a decision. We went through our whole curriculum and said let's put all of our emphasis on cardiovascular fitness."

One of the first steps forward was realizing that in this age of technology, children react best to a computer-driven PE system.

"We have computers hooked up to every weight machine," Lawler says of the 40-station fitness centers his district has at five junior highs. "A kid punches in his ID, and computers measure everything. They can push a button and get an exact readout on their workout."

In the first year of cholesterol screening, Naperville teachers could determine that 50% of their students had elevated levels.

"This is the kind of thing that could be happening nationwide," says Lawler, who established his first fitness center without tax dollars, entirely through community support.

But money shouldn't be the deciding issue, Lawler says. "What does a heart attack cost?" he asks.

One answer is provided by the American Heart Association, whose most recent figures show that in 1995 alone 573,000 Americans had coronary artery bypass surgery at an average cost of \$44,820, a total of \$25.7 billion.

Target-rate zone

Naperville makes extensive use of heart-rate monitors, teaching children to exercise in a "target-rate zone" that raises the pulse but doesn't exhaust the student.

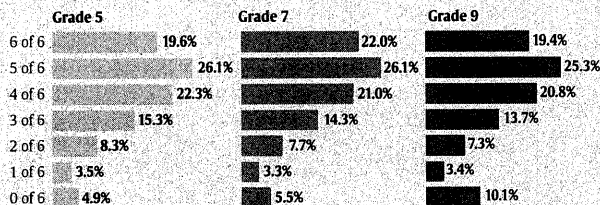
"We grade kids on how well they stay in their target-rate zone," Lawler says.

Says Naperville seventh-grader Jacqueline Garretson: "I've learned it's not always the easiest thing to do, going to a fitness center, but I've learned things about how I can be healthy when I'm older. And I'm having fun while I'm doing it."

California fitness tests track progress

In 1999, the California Department of Education conducted statewide tests of students in the fifth, seventh and ninth grades in six areas of physical fitness: aerobic capacity; body composition; abdominal strength and endurance; trunk extensor and flexibility; upper body strength and flexibility; and overall flexibility. The standards for meeting the "health fitness zone" were established by the Cooper Institute for

Aerobic Research and were meant to represent a level of fitness that offers some degree of protection against diseases that result from sedentary living. Under state law, California will repeat the study every two years, hoping to track the development of successful programs while amassing data to compare nationally. The percentage of students who passed the fitness standards:



Source: California Department of Education

By Marcy E. Mullins, USA TODAY

She's also developing an awareness of the health mistakes many Americans make.

"There are people in my family who have had health problems and high blood pressure," she says. "I think they could have avoided some of those things if they had learned this when they were young."

For Jenny Mayor, a high school senior in Naperville, the most important thing she has learned is that her school's program "tailors everything to what each student needs, and that way you work on what you need most. That helps me personalize my goals."

Without instruction on physical education, Mayor says, some teenagers don't understand what fitness really means.

"A lot of kids just look at looks," she says. "You could be really thin and think you're in good shape, but when you start to exercise you realize you're not. By learning this now, maybe it will help you throughout your life."

Mayor ran the mile in 13 minutes in junior high, last year got down to the nine-minute range and this year has improved to 8:10. She says she wouldn't have taken up the activity without PE classes and believes her improvement has carried over into her academics.

"You see yourself improving, and it gives you more confidence," Mayor says. "I think that confidence helps me with studying, just because you feel better about yourself and you want to do better and you want to try harder."



By Anne Ryan, USA TODAY

Numbers don't lie: Sophomore Sara Baum, 15, checks out her progress while working out at school in Naperville, Ill.

Sophomore Nadine Youssef also has benefited in self-esteem. "It makes me happier with myself that I'm exercising regularly and taking care of myself," Youssef says.

Overcoming the past

The Naperville schools use the computerized TriFIT health management system, made by HealthFirst. The software analyzes the students' performances and provides specific suggestions for continued improvement.

"That's so new and different," Youssef says. "You put in statistics about yourself and it can tell you what you need to exercise, what you need to work on individually."

Over the last two years, 40 schools have sent representatives

to study Naperville's program.

But before the philosophy can spread, Lawler says, some built-in resistance has to be overcome.

"Probably 60% of our population had real bad experiences in PE, and those people are now our legislators, administrators and teachers," Lawler says. "I think there has to be a revolution at the university level to prepare teachers to teach 'the new PE.'"

One state where that's happening is Kansas.

In 1992 the Kansas Health Foundation challenged the state department of education to implement a curriculum that would teach skills for healthy lifestyles. It also has provided \$15 million in grants to the Physical Dimensions program now used at 148 middle schools

and 152 high schools.

"It does take a lot of work to train teachers who have been out in the field for 20 years," Physical Dimensions director Bobbie Harris says. "It's hard to get them to change. But we haven't gotten anybody who has gone through the training and come back and said it doesn't work."

Some of the games might make a Vince Lombardi-style football coach wince.

There's lots of rope-jumping, Frisbee-throwing, scarf-juggling, hula hoops and even games of catch with rubber chickens.

"The whole time you're running and you're working as a team," Harris says. "Then we say, 'Oops, look, your heart rate is up.' We did line dancing at a high school the other day. Heart rates were up over 140 for 12 minutes, and it was fun and it was non-threatening."

The only criticism Harris has encountered is "some people think we're being soft on kids, but every kid is participating with his heart rate up."

As for the old, drill-sergeant approach to PE, Harris says, "The boot-camp thing didn't work, with push-ups as punishment or having them run a lap. Wait a minute. You want me to run, and yet you punish me with it?"

Community involvement

For schools seeking modern equipment, the Bay Shore Union Free School District on Long Island, N.Y., suggests starting where health interests are highest: hospitals.

Bay Shore received \$20,000 grants from the Good Samaritan Hospital Medical Center in West Islip and from Southside Hospital in Bay Shore, plus \$15,000 worth of equipment.

Bay Shore educators have stressed overlapping their fitness efforts into other areas of academic study.

Use of computers and heart-rate monitors involves math; diet instruction involves science and nutrition; lessons on cardiovascular improvement deal with anatomy and physiology.

"We bring the real world into the classroom," Bay Shore athletic director Gene Gyer says. "What can be more real to a young person than their wellness?"

► The new PE, Cover story, 1C

Obesity of youth is 'epidemic'

"We're in the midst of an unprecedented epidemic of obesity among young people," says Howell Wechsler of the Centers for Disease Control and Prevention's Division of Adolescent and School Health.

"It's been consistent in every demographic group you can imagine," Wechsler says.

Besides heart disease, increases in obesity also heighten risks of colon cancer, diabetes, osteoporosis and other diseases among young people, Wechsler says.

To reverse the trend, he says, "There's no magic bullet. It's going to take a lot of work. We see very clearly that something has to be done and that school education is a great vehicle to get something done, particularly because the field has matured so much over the last 30 years."

The decline in activity also might be affecting U.S. military forces.

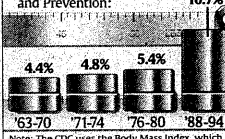
"One of my perceptions is that with the decline of activity with today's youth, they're not coming in as fit as they were 10 and 15 years ago," says Col. Michael Malachowsky, commanding officer at the Pariss Island, S.C., Marine Corps Recruit Depot that trains about 17,000 recruits every year.

"We get kids down here who haven't done much more than walk to school, if that," he says. "These kids are growing up on Whoppers and sodas."

By Tom Weir

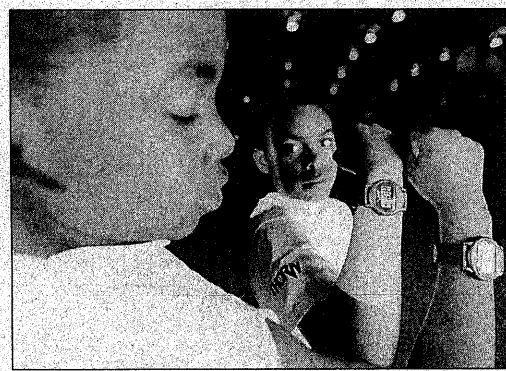
Overweight kids on the rise

Progression of U.S. children ages 6-17 defined as overweight by the Centers for Disease Control and Prevention:



Note: The CDC uses the Body Mass Index, which assesses the relationship between weight and height.

By Suzy Parker, USA TODAY



By Craig Hacker for USA TODAY

Healthy start: Coleman (Wichita) sixth-graders Stephen Williams Jr., left, and Martez Lynch wear wireless Polar heart monitors.

Heart monitors make kid's play safe

The tool that gets the most mention among advocates of "The New PE" is the heart-rate monitor.

By looking at a wristwatch display during exercise, students can make sure their pulse rates stay within a target zone that is active but short of exhaustion levels.

"We have to get the whole population to understand that this is a tachometer," says Tom McKoy, senior vice president for Polar Electro heart monitors. "A lot of people try to exercise and quickly become discouraged either because of discomfort or because they can't compete with the guy next to them. The first thing the heart monitor does is slow them down."

Polar Electro, a Finnish company,

introduced the wireless devices, connected to a device worn around the chest, in 1979. It estimates that its products are used by 1 million U.S. students at 10,000 schools. Sophistication levels of monitors vary. The ones Polar Electro recommends for schools cost about \$125 and can record workout data.

Monitors aren't sold as a diagnostic tool, but usage in schools has led to early detection of heart problems.

Last year at Spring View Middle School in Huntington Beach, Calif., PE teacher Linda Ward noticed that a 12-year-old student, Megan Pulfer, had an unusually high heart rate while running — more than 200 beats a minute.

Pulfer, active in ballet, was considered fit. But a cardiology exam revealed a hole in her heart, which soon was corrected by surgery.

Phil Lawler, PE coordinator in Naperville, Ill., says his district's use of heart monitors has led to detecting some form of heart disease in at least six students.

"Tell me that the perspective of those parents on physical education didn't change in a moment," Lawler says.

Monitors also allow students to focus on their personal improvement, rather than gauge their performance against other children who initially might be far more fit.

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