



HEART ZONES

Physical Education Please Meet The New SMART PE *PE is Not What it Used To BE*

Forty plus years ago, just before I was born, both my parents started their careers as physical education teachers. That was in 1975. Physical Education class then looked like students crammed into a crowded gym space standing around waiting for teachers to start the class, or discipline a student, or deal with uniform violations as they donned a whistle used to get student's attention. That was then. There's a new and smarter way that I want to share with you.

We face a crisis in kids inactivity called "sedentaryism". CBS News recently reported that researchers found kids' cardiovascular fitness declined worldwide by five percent for the past four decades. One standard fitness assessment, the mile run, today's kids are about a full minute and a half slower than children were 30 years ago. And overall, kids were determined to be 15 percent less fit than their parents were as children. You might ask why is this decline in children's fitness happening. I will explore in this article my rationale for this decline. And, I'll share my strong and ardent beliefs in how we can get kids moving more and where this is happening.

One of the many different solutions to getting students back on track to a healthy lifestyle is happening in my very own backyard, changing how Physical Education is taught in Stillwater, Minnesota. Stillwater Area Public Schools is where I work as a technology integration specialist. It is with my position that I get to work closely with twenty-two P.E. teachers where they are fusing the tools, the curriculum and platforms to create a revolutionary new Smart P.E. program. As a district, our PE teachers are engaging students by meeting them where they are today not yesterday. Most kids love technology that helps them to meet their threshold for fun and meaning. Our PE teachers have begun utilizing technology to challenge their students to get more active. They have empowered their students to discover the critical connection between health and movement. Students are moving more, engaged, confident, inspired, motivated, challenged and on top of it, learning more about their own individual and personal fitness.

Our thirteen schools in Stillwater could not have done this alone. This transformation started two years ago with the integration of four components: (1) professional development, (2) new curriculum (Smart PE) based on tracking and monitoring movement, (3) cutting-edge technology with hardware and software applications, and devices and sensors to track data.

Even the first few minutes of the PE class is different - it starts with each student putting on a sensor and turning it on. We are currently using two but soon more sensors: heart rate sensors and activity tracking sensors. The day of the tired pedometer is over. Enter the era of smart sensors that can collect, display, share, store, and make meaning out of robust data like total steps, steps per minute, distance, calories burned and quality of the steps.



The Blink armbands are a new breed of heart rate monitors - they are worn on the arms or legs of students and are comfortable and smart. They flash a colored light to match the intensity of effort to immediately show the student how hard they are working. This heart rate sensor detects the cardiac frequency of the heart, communicates that data to a small signal aggregator, The Bridge, which then converts that to a signal recognized by an Apple iPad. The software application on the iPad, Heart Zones PE saves the data locally and displays it on "The Big Board" a large jumbotron type display for the students to use as a guide during their activity. Visible data like steps, zones, calories, points as a motivator for students as they now have a target goal to achieve. The ability to efficiently display and make contextual sense out of data, paired with grading and providing challenges and games by individualizing the activity based on each student's current level of fitness is a game changer.

At the end of the class, students return their heart rate sensors to their check-out station so class management is easier. Each student or parent/guardian is emailed an automatically generated report containing the critical data from that class period. And, the technology works both inside the gymnasiums, the fitness centers and outside on the fields - it's wireless, small, and portable.

The Heart Zones System has taken the guessing out of assessing. The System allows for assessments and grading to meet Common Core requirements. Our teachers can easily accomplish this with the Heart Zones P.E. app. PE teachers save time now that the system takes roll and there is no longer the time students wait as they stand in line to upload data from their device. Unlike other systems, the Heart Zones System is user friendly and has a responsive interface that is intuitive. For the first time, our teachers have a fair, objective, and quantitative way to assess and grade students in PE.

Because of the student outcomes, results from using the Smart PE technology and curriculum, the level of respect for PE as a requirement and as an elective has steadily improved in the Stillwater Area Public Schools and throughout the community. Students take PE seriously, it's no longer just "playtime" or a glorified recess period. The belief that we are instilling in our elementary, junior high and high school students is critical and we are putting the word "education" back into Physical Education. Our goal is to lead our students to a lifetime of happy and healthy living. When we model this expectation at this stage of development, we are discovering immediate results that have a long lasting impact.

In Stillwater Area Public Schools, we accept the risk of being an early adopter of technology and curriculum based on tracking, measuring, monitoring, and motivating. I believe that the solution is to find a way to get the Heart Zones System into every school PE program in America. In Stillwater, we will continue to focus on this goal to achieve that. I am proud to be a part of making a difference in the lives of children through the innovative PE program we put into action every day in Stillwater Physical Education program.

I believe that by teaching Smart PE to our students they will get smart from PE. After all, isn't that what we want?

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