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Canadian District Goes to School on Concussions

By JEFF Z. KLEIN OCT. 4, 2014



Andrea Cavaco taught a version of a school board's concussion course to sixth graders. Credit Aaron Vincent Elkaim for The New York Times

BURLINGTON, Ontario — For decades, schools across North America have taught about public health issues like the dangers of tobacco and drug abuse. But this academic year in one large Ontario school district, students are learning about a newly identified public health concern: concussions.

Last month, the Halton District School Board, near Toronto, started immersing its more than 4,000 ninth graders in a detailed course on concussions and other traumatic brain injuries. District schools are also teaching modified versions of the curriculum to some students in third and sixth grades. It is believed to be the first course of its kind to be taught across an entire school district in Canada or the United States.

“If we’re going to change the culture around concussion like we changed the culture around smoking and around drinking and driving, we need to get at our next generation of kids,” said Joanne Walsh, who helped devise the program as the school board’s health and physical education coordinator, along with Dr. Paul Echlin, a researcher on traumatic brain injury in hockey, football and other youth sports.



Joanne Walsh helped devise the school board’s concussion course. Credit Aaron Vincent Elkaim for The New York Times

The Halton school board hopes that its curriculum, formally called the Halton Student Concussion Education Project, becomes a model for schools across the continent. Formulated partly in response to a provincial government mandate for school districts to set concussion policies, Halton’s curriculum [is available on the Internet](#).

It is “interactive, validated, modifiable and, most important, free to any board of education,” said Echlin, who [published a paper](#) about the Halton program on Friday in The Journal of Neurosurgery.

The Halton curriculum includes [online modules that take students through question-and-answer sessions on topics related to concussions](#).

The sessions describe symptoms that may indicate a concussion, how to care for someone with a suspected concussion and how to navigate the challenges of recovery.

The online teaching tools also provide links to video reports on concussions and other traumatic brain injuries from sources like “60 Minutes,” the National Athletic Trainers Association and The New York Times’s [series on the N.H.L. enforcer Derek Boogaard](#).

The Halton effort is the latest and most extensive in a series of concussion safety initiatives at schools across the continent since Washington State enacted the Lystedt Law in 2009.

That law, named after a 13-year-old who sustained a serious brain injury during a football game, mandates that athletes suspected of having concussions be removed immediately from games, along with guidelines for their safe return to play, and requires education about concussions for coaches, players and parents.

Forty-eight states and Washington, D.C., have similar versions of the law, but the education provision is often not rigorous.

“In essence, all you have to do to is supply athletes and parents with an 8 ½-by-11 sheet of paper on the dangers of concussion, and you’ve complied with the law in most places,” said Lindsey Barton Straus, a lawyer and director of research for the youth sports safety organization [MomsTeam](#). Straus has kept a [detailed running tally of states’ versions of the Lystedt Law](#).

Arizona, which requires all student-athletes to take a concussion course, is considered perhaps the most advanced state in this type of education.

Halton’s 61,000 students include a number of elite-level athletes, most visibly in hockey. Burlington and Oakville, the two largest cities in the district, have produced about two dozen N.H.L. players and many others who have skated in the major junior and professional ranks.

When pilot versions of the concussion curriculum were taught to selected classes last year, hockey was often the first point of reference for students.

“A lot of my students had seen Sidney Crosby and other players on TV, and it was almost like a badge of honor to have a concussion,” said Andrea Cavaco, who taught a version of the course to her sixth graders at Emily Carr Public School in Oakville.

The 11- and 12-year-old hockey players in her class, many of whom trained for their sport before and after school, saw their concussions as putting them at the same exalted level as their N.H.L. heroes.

“I was surprised that they had essentially received the same message I got when I was growing up,” Cavaco said — to stoically shake off a head injury and play through it.

But her students' attitudes changed drastically during the year, she said. She was coaching her school's boys' team at a volleyball tournament for fifth and sixth graders when one Carr boy hurt his head but stayed in the match. His teammates refused to resume play until he left the court.

"They would not get off the bench," Cavaco said. "It had nothing to do with me; it had to do with their learning. In essence, they were willing to forfeit the game because one of their teammates hadn't reported his head injury."

Photo



A worksheet in the curriculum of the concussion course.

"There was a moment I'll never forget, where you sort of scanned the crowd, and the parents are saying, 'What's going on?' To me, that was hugely meaningful."

The Halton curriculum, which is meant to be taught throughout the school year, seeks to instill a new form of peer pressure in which students look for signs of concussions in others and direct an injured person to refrain from activity and seek a doctor.

Walsh, who is continuing with Halton this year as a consultant, said, "In our health and physical education curriculum in Ontario, which is what we've attached this to, there's a very key component about not just caring for yourself, but caring for others and being part of the community and advocating for the health and safety of others."

Whether other districts emulate Halton's concussion education program is an open question. Some cost-conscious boards are leery of diverting time and resources to developing a course. In districts in parts of the United States, curriculums perceived as arising from a central authority or a faraway place can meet resistance.

"There are a lot of independent folks in the West, and local folks are not that interested in having the government tell them what to do," said Bill Landen, a Wyoming state senator who sponsored a 2011 bill that mandated statewide health and injury protocols for school athletes.

Before passage, that bill had to be amended to allow local districts wide latitude in protocol development, he said.

There is resistance to concussion prevention programs in other places.

“Football is so much a part of the culture in places like Oklahoma, Nebraska, Colorado,” said Brooke de Lench, the executive director of MomsTeam, “and people there are afraid that concern over concussion will lead to the abolition of their sport.”

De Lench is the leader of a project aimed at reducing the concussion rate of the high school football team in Newcastle, Okla. That project was recorded [in an hour long documentary, “The Smartest Team,”](#) being shown on PBS this fall.

Even in the Halton school district, some share that concern.

“We’re at a point now where the pendulum may have swung too far, and we raise the risk of concussion so much that it scares people,” said Rick Taylor, an amateur football coach in Burlington whose 13-year-old son has played club football in the city for four years.

He added: “The other end of the pendulum is, ‘Don’t play football; you’re going to get injured,’ and that would be a disservice to millions upon millions of kids who will never get another experience like it in their lifetime. There’s nothing better for a lot of boys than getting a chance to play the game of football with a team — the values, the lifelong memories and friendships.”

Still, Taylor said he would not object to the Halton concussion course being taught to his son when he enters ninth grade next year.

“It’s not my place to interfere with what the teachers and the system want to teach my kid,” he said. “But it is my place to discuss it with him.”

Although the Halton program stresses that traumatic head injury can occur in a non-sports context, sports seemed to be the area that most engaged students during last year’s pilot programs.

“With the grade nine boys, you got a lot of sports stories and how their own coaches handled [head injuries](#),” said Martin MacIntyre, who taught the curriculum to a class last year. “A lot of the discussion was, ‘I was seeing stars, and my coach put me back in after five minutes.’ So a lot of the talk was what to do if your coach tells you to go back into the championship game — coming up with strategies to handle that, or to handle your parents’ expectations.”

Teenage boys finding ways to stay out of a big game to care for a head injury is a 180-degree turn from the way most elite athletes handle that situation. Typically, top athletes will hide their symptoms, or lie about them, to stay in a game.

Echlin’s research in 2010 found that junior hockey players sustained concussions at a rate [seven times greater than previously reported](#), amid a culture that valued notions of toughness over the damage caused by traumatic brain injury.

“What I found in my work with the hockey players is you’re not going to change a generation, even though they want to change or say they want to,” he said. “So it’s about getting to the 10-year-olds and letting them become the next generation, to make this shift.”