The Ivy League Becomes the Future of Football

By Marc Tracy

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HANOVER, N.H. — The earliest football game between two eventual members of the Ivy League took place when Columbia played Yale in 1872. Dartmouth's football team had its first intercollegiate game in 1881, several years before the sport was formally introduced at Ohio State and Alabama.

This is supposedly the league of football the way it once was. But today, in this northern outpost of the Ancient Eight, a program soaked in football's past is trying to drag the sport into the future.

In 2010, the Big Green eliminated tackling in all practices — even preseason camp and spring ball. Coach Buddy Teevens likes to say that a freshman will play four years without being tackled by another Dartmouth player. The N.C.A.A. has since recommended dialing back contact significantly in practice.

A couple of years ago, Dartmouth began using moving robots as tackling dummies. The tall, remote-controlled cones of padding whir along Memorial Field's turf like R2-D2. Now, more than half of N.F.L. teams, several dozen college programs and around 100 high schools have these mobile virtual players, or M.V.P.s, Teevens said.

Last month, the team hired Callie Brownson as offensive quality control coach, making her the first full-time female coach in the history of Division I football.

All three innovations, Teevens said, were geared toward making football safer, minimizing the head trauma that scientists have linked to degenerative brain disorders like chronic traumatic encephalopathy, or C.T.E.

Brownson is a trailblazer in football and an aberration in Division I men's sports, where fewer than 10 percent of assistant coaches are women, according to Richard Lapchick, an advocate for diversity in sports.



Dartmouth Coach Buddy Teevens has made his team better and less prone to injury. Ian Thomas Jansen-Lonnquist for The New York Times

As an intern in Dartmouth's football program, Brownson had impressed the staff and players. Teevens first encountered her and other female coaches at the Manning Passing Academy, a skills camp he helped found, with Archie Manning and his famous sons, when he was Tulane's head coach a quarter-century ago. He realized there were many women coaching youth football, and he wanted them "to come in and benefit the game," he said — to learn his gospel of safety and then spread the good news.

"If they're coaching," he said, "can they coach more safely?"

Teevens, 62, casts his unusual policies as enlightened self-interest. Practices with less contact mean fewer injuries and fresher players. Never tackling teammates means more, and more precise, work on tackling technique. He estimates that Dartmouth has cut its missed tackles by two-thirds. (The M.V.P.s also represent another kind of enlightened self-interest: They were Teevens's idea, and he is chairman of the company that manufactures them.)

In 2010, the year Teevens got rid of tackling, Dartmouth had its first winning season in 13 years. In 2015, Dartmouth was 9-1 and won a share of the Ivy title. The one loss that year came against Harvard, which Dartmouth (6-0) faces this weekend. "This is probably the best Dartmouth team in the last 25 years," said Tim Murphy, Harvard's coach since 1994, calling the Big Green "as big and strong and physical a team as we'll see all year."

Beyond wanting to win, Teevens is motivated by a fear that an irreplaceable sport could die.

"I think it's too valuable a game to say, 'Oh, we'll do something else,'" he said. "But I also look at the data and the medical side of it. Something has to be done."

The bet is that the sport can be salvaged by incremental changes that might help save players like Owen Thomas, a University of Pennsylvania team captain who hanged himself in 2010 and was then found to have C.T.E.

"He's trying to make his players safer in a way that hasn't hurt them on the field," said Chris Nowinski, a founder of the Concussion Legacy Foundation. "He's proving we can change football, make it safer, work within the system."



Harrison Herskowitz practiced with a robotic tackling dummy at Memorial Field in Hanover, N.H. Ian Thomas Jansen-Lonnquist for The New York Times

"Will it save the game of football?" Teevens said. "I don't know. But I think it's a step in the right direction."

Every level of football has recently implemented measures to protect players' brains. Youth leagues have adopted flag football. Something called "modified tackle" has infiltrated high schools. College football instituted severe penalties for "targeting." The N.F.L. limited contact in in-season practices. Many college teams have elected to reduce contact in in-season practices, too.

But the Ivy League — which besides Columbia, Dartmouth, Harvard, Penn and Yale features Brown, Cornell and Princeton — is on another plane, Nowinski said. In 2016, after a unanimous coaches' vote, it banned tackling during in-season practices, although teams other than Dartmouth still tackle in the spring or the preseason. (Along with Teevens, Harvard's Murphy had already stopped in-season tackling.) The same year, the Ivy League altered kickoff rules to discourage returns. That reduced the concussion rate on football's most dangerous play fivefold, according to a new medical study.

During the same period, the league emerged as among the best at its level. Its out-of-conference record this season and last, 36-12, was tops in the Football Championship Subdivision.

To be clear, Ivy League players still tackle one another in games. Also, at a recent practice, Dartmouth linemen collided violently after snaps, their helmets bashing against one another. Subconcussive hits delivered by such plays — which are routine and unavoidable for players who block or rush — have been linked to long-term cognitive impairment.

Teevens drew a parallel to the time that President Theodore Roosevelt (Harvard class of 1880) convened a White House meeting with college sports officials, including Harvard's and Princeton's coaches, to address football safety. One solution they came up with was allowing the forward pass.

"Here we are, the petri dish," he said, "doing some stuff that maybe other people will feed off of."



Dartmouth football's offensive quality control coach, Callie Brownson, is that rare thing in Division I men's sports — a female coach. Ian Thomas Jansen-Lonnquist for The New York Times

Teevens speaks with the zeal of the convert and the monomania of the activist (as well as the thick accent of someone reared a short drive south of Boston).

An all-Ivy quarterback at Dartmouth, he spent five years as his alma mater's head coach and then took the top job at Tulane before the 1992 season. Later, he was an assistant at Florida under Steve Spurrier. In 2002, he was named head coach at Stanford, where he was 10-23.

Teevens returned to Dartmouth in 2005, knowing it would probably be the final stop in his career. In his first five seasons, Dartmouth was 9-41. Inspired by medical research and advice from mentors like Spurrier and Bill Walsh to keep players healthy, he banned tackling.

"We had guys banged up," he said. "And part of it was, I think this is the right thing to do, and if this is my swan song, O.K."

The program improved drastically. "Not having that wear and tear every day is super helpful," Drew Hunnicutt, a senior wide receiver, said.

Teevens tinkers with tackling technique the way a French chef perfects his Hollandaise sauce. He and his staff broke down every tackle from the 2016 Ivy League season -3,700 in all - to determine ideal style. He suggested the idea for the M.V.P.s to a college classmate now at Dartmouth's engineering school with the purpose of simulating a moving target without using a player.

The next frontier is blocking. Eliminating blocking would not so much reform football as fundamentally alter it. Teevens does not want to be the cause of lasting brain trauma, but he does not want football to end, either.

He has been breaking down more tape. What if players learned to block lower, minimizing head-to-head contact?

"That's the thing I'm working on right now," he said.

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