Mathematicians Answer the Great Sports Question:

Who Is The Greatest NCAA Coach of All Time?

Greatest NCAA Women's Soccer Coach

Anson Dorrance

Head coach of the UNC Lady Tarheels, Anson Dorance has achieved one of the most successful coaching records throughout any sport. After leading his team to a 101-game undefeated streak, Dorrance was elected into the National Soccer Hall of Fame. Under him, the Lady Tarheels have won 21 of the 31 NCAA Women's Soccer Championships to date.

Greatest NCAA Coach

Tom Osborne

Highest ranked in absolute performance as well as performance improvement, not only was Osborne mathematically determined to be the best NCAA football coach of all time, he was determined to be the best NCAA coach of all time. As head coach of the Nebraska Cornhuskers, Tom had the all-time 2nd highest win percentage, winning several national championships and finishing his career with 25 bowl appearances.

Greatest NCAA Men's Basketball Coach

Mark Few

Mark Few, head coach of the Gonzaga Bulldogs for 15 years, was found to be the top NCAA Men's Basketball coach of all time. Within his first 2 years as head coach, the Bulldogs had made 2 appearances in the NCAA's Sweet Sixteen tournament bracket. Moreover, Few was able to take Gonzaga to the NCAA tournament each of his 15 years.

"How can math determine the best coach? Isn't that subjective?"

The Algorithm

The performance of any NCAA coach is measured purely on how well the teams he coached performed. There are two key components to this:

1) their ability to improve the performance of a team over time [absolute performance], and

2) their skill in maintaining an excellent level of performance throughout their career [performance improvement].

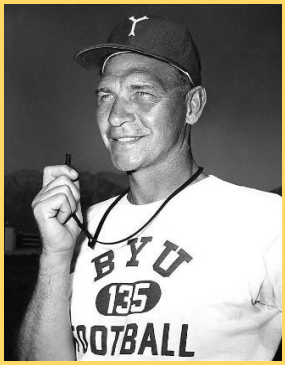
To measure either of these, mathematicians had to develop an algorithm to rank teams throughout history that would not need to rely on the possible biases of human opinion that are seemingly-unavoidable in the sports world.

To accomplish this on a season-by-season basis, they realized that the best idea would be to generate a system to rank the coaches' teams in such a way so that the number of upsets observed in that season was as small as possible. Looking at it another way, the mathematicians designed an algorithm to answer the question: "By looking at the data from a past season, what's the best way to rank all the teams so that the outcomes from this season would make the most sense?"

Once they had the rankings for all the seasons of a certain sport, they were able to cross-reference the team's performance with the person who coached it that year. Somebody who coached several years would then have a group of data points associated with them that measured how well their teams had performed throughout that coach's career. Using statistical methods, the mathematicians were able to combine each coach's data points, being careful to take into account the two key components mentioned before, into a single score. Finally, the coach with the top score was considered to be the best coach of all time for that sport.

Since this concept is applicable to nearly any sport, they were able to apply it across a wide variety of sports. Also, since the coaches' final scores and rankings are comparable *between* sports, the mathematicians were able to determine who the best NCAA coach of all time was for *any* sport!

Worst NCAA Coach



Hal Mitchell

As a bonus, the mathematicians were able to use the same concept in their model to turn the question around and definitively answer: "Who is the *worst* NCAA coach of all time?"

Meet Hal Mitchell, former NFL offensive tackle and head coach at BYU for the three seasons from 1961 until 1963. In his first season, he managed a 2-8 record, and one of his assistant coaches immediately quit. Things started looking up in his second season, when he dragged the team kicking-and-screaming to a 4-6 record. It wasn't until this third year, when he finished with yet another 2-8 record, that he decided that maybe coaching wasn't for him and proceeded to permanently hang up the coaching towel.

Sorry Hal!