

## **Opinion: Cracking the code, NET and Quadrant system's impact on March Madness selection**

I often joke that I was put on this planet solely for March.

It's interesting because I hate so many things about that time of year. In Central New York, it is the weird back half of winter, where it's not really winter but you could also wake up to six inches of snow and sunshine.

In a way, that is part of its beauty — the unpredictability. The same can be said about 68 teams playing in a single elimination tournament to determine who is the best in the country.

I can get over anything if it means I get to consume March Madness.

You often hear the phrase, “Anything can happen in March.” It’s true, but everything that happens is set into motion by what takes place in season.

There are so many analytics in place to determine what teams are the best. But at the end of the day, none matters more than the NCAA Evaluation Tool, more commonly referred to as the NET.

The NET has existed for seven seasons of college basketball. It replaced the Ratings Power Index or RPI. By comparison, the NET is a more analytical formula than RPI.

RPI is based on three main components— a team's winning percentage, the average opponent's winning percentage, and the average opponent's opponent's winning percentage.

So, how is the NET different?

The NET includes more components than just winning percentage. Although it is a useful predictive metric, it is not the be-all and end-all. Like the art of bracketology itself, it can be convoluted and even vague at times.

It takes into account five major algorithms:

## Team Value Index

- The most important component of the NET, rewards teams for beating upper-echelon squads, which makes the entire system results-based.
- This game results-oriented component, factors in the following:
- Opponent
- Location
- Winner

## NET Efficiency

- Offensive efficiency calculation:
- $(\text{Field Goal Attempts} - \text{Offensive Rebounds} + \text{Turnovers}) + .475 \times \text{Free Throw Attempts} = \text{Total Number of Possessions}$
- $(\text{Total Points} / \text{Total Number of Possessions}) = \text{Offensive Efficiency}$
- Defensive efficiency calculation:
- $(\text{Opponent's Field Goal Attempts} - \text{Opponent's Offensive Rebounds} + \text{Opponent's Turnovers}) + .475 \times \text{Opponent's Free Throw Attempts} = \text{Total Number of Opponent's Possessions}$
- $(\text{Opponent's Total Points} / \text{Total Number of Opponent's Possessions}) = \text{Defensive Efficiency}$
- $\text{Offensive efficiency} - \text{Defensive efficiency} = \text{NET Efficiency}$

## Winning Percentage

- $\text{Wins} / \text{Total Games Played} = \text{Winning Percentage}$

## Adjusted Win Percentage

- This is weighted based on the location and result of each game.
- Road Win: + 1.4
- Neutral Win: +1.0
- Home Win: +0.6
- Road Loss: -0.6
- Neutral Loss: -1.0
- Home Loss: -1.4

## Score Margin

- This value has a point differential capped at 10 points in each game. All overtime games are capped at one point.
- Scoring Margin = team score - opponent's score.

Again, but in English, these five calculations determine a team's NET standing, which is updated every day and takes into account game results from the day before.

It's less about where teams stand in the NET compared to where their opponents do.

And that's where quadrants come in.

## What's a quadrant?

Using the quadrant system, the quality of wins and losses will be organized into four categories based on game location and the opponent's NET ranking. Evaluating a team's resume in terms of where their wins and losses fall in the four quadrants is an imperative part of the NCAA March Madness selection committee's process to determine who is in and who is out.

## Let's break them down.

Quadrant 1: Home Court 1-30, Neutral Court 1-50, Away Court 1-75

Wins in Quad 1 pack the most punch on any resume, the more Quad 1 wins the better.

These wins pop up when the selection committee is determining who makes it into the field of 68 teams to play in March Madness. Because of this, they are the hardest for teams to acquire throughout the season. The qualifications of these high-level wins take into account the added difficulty of winning on the road, or anywhere away from home. The nature of college basketball shows us that road wins are harder to come by when the home team has the support of their crowd. In conference play, a win against a team on the road can be a lot more valuable than beating them at home.

For example:

- Syracuse is currently ranked #85 in the NET and beat Pittsburgh, which is ranked #60 twice this season.
- The win at home was a Quad 2 win, while the win on the road is a Quad 1 win.
- Syracuse tacked on their second Quad 1 win of the season beating UNC on February 13th (2-7 in Quad 1).
- The system rewards winning away games.



*PITTSBURGH, PENNSYLVANIA - JANUARY 16: Judah Mintz #3 of the Syracuse Orange passes the ball as Ishmael Leggett #5 of the Pittsburgh Panthers defends in the second half during the game at Petersen Events Center on January 16, 2024 in Pittsburgh, Pennsylvania. (Photo by Justin Berl/Getty Images)*

Quadrant 2: Home 31-75, Neutral 51-100, Away 76-135

Wins landing here still can provide a boost to a team's resume, even if they're not headline-grabbing.

The current Quad 2 win that stands out on Syracuse's schedule this year is the win over Miami in the JMA Wireless Dome.

Quadrant 3: Home 76-160, Neutral 101-200, Away 135-240

This is the most likely category for a team to suffer a “bad” loss.

Right now, Syracuse has 1 Quad 3 loss (6-1). It came when they lost at home to Florida St. in January.

Quadrant 4: Home 161-353, Neutral 201-353, Away 241-353

The easiest games on a team’s schedule. Often time you see these early in the year, as coaches schedule easy games to determine what they need to work on as they approach conference play. Losses here don’t happen often, and they can be detrimental.

It boils down to beating good teams (especially away), and not losing to bad teams anywhere. If you can do that, the system will reward you.

The Quadrant record of every Division I team adjusts daily, as NET Rankings adjust. Quad 2 wins can bump up to Quad 1, and vice versa.

It forces fans, especially fans of teams who are mentioned in Bubble Conversations as March approaches, to root for the teams they have already beaten to win against strong opponents. If the resumes of teams they have beaten strengthens, that in turn strengthens their resume.

Thirty-two teams don’t have to worry about the quadrant system and those are the automatic qualifiers that win their conference tournaments. In this case, the quadrant system could be used to determine seeding.

The other 32 teams who don’t win out of their conference tournament experience having their fate more directly tied to the Quadrant system, although as previously mentioned, it’s not an end all be all. More often than not, the teams who win conference tournaments are usually ranked relatively high in the NET, aside from your usual Cinderellas. Based on the NET and Quadrant system, a team would want to be in the top 75-80 in the NET to have a fighting chance to get a tournament bid.

Never, ever tell me that sports fans aren't complete nerds. Arguably the best kind of nerds.

As I was growing up, I always told my dad that I wanted to be Joe Lunardi or Jay Bilas. Quite niche aspirations, but still true.

I want to know so much about college basketball, and deliver information so succinctly, that people come to me for answers.

But I've since determined I would so much rather do that as Rachel Culver.